

*Rutgers University
Studies in
Classical Humanities*

Volume VIII

THEOPHRASTUS

Reappraising the Sources

Edited by

Johannes M. van Ophuijsen
Marlein van Raalte



THEOPHRASTUS

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Theophrastus: Reappraising the Sources, volume
VIII

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Preface

What's new in Ancient Philosophy? At the time of the biennial conference of Project Theophrastus held in Leiden, July 1993, the edition of *Sources* for Theophrastus (FHS&G, 1992) was less than a year old. The essays in the present volume are largely the materialisation of the papers presented and discussions occurring during that conference, centering on the question: "Do the new fragments add up to a new whole?" A company of scholars set themselves the task of reappraising the sources, most of them friends in a special sense through ties forged by Project Theophrastus, but at the same time representing a wide enough range of views on the achievements of their author to guarantee the sparks of intellectual fire required for progress in the Humanities.

In conformity with the theme of the conference, most of the articles in this volume are concerned in some way with the question what is Theophrastus' own contribution to the various areas of study cultivated in the Peripatos. It is agreed that Theophrastus develops his views on philosophy and science in close connection with those of his teacher Aristotle. But to what extent and in what respect can his work be said to mark an advance on that of his predecessor? And what is the philosophical motivation behind his activity? Is he filling in gaps and working away at what is still a basically Aristotelian structure? Is he a systematic mind aiming to impose some sort of coherence and consistency on a growing body of positive knowledge? Or do we have a foreshadowing of the dissolution of Peripatetic thought into various more loosely connected disciplines? Or are we rather facing a problem-oriented, even an aporetic thinker? And what (new) light do the *Sources* cast on Theophrastus' intellectual position in relation to the Stoa of Zeno and the Garden of Epicurus as well as to the contemporary Academy and even to the Peripatos as represented by the colleagues, pupils and successors of Theophrastus?

The answers provided in this volume are diverse and ground-breaking. There will be further discussion both in the commentaries to the *Sources* (in nine volumes) and in independent monographs. In particular, we can expect new insights and new controversies as scholars con-

front the texts collected in *Sources* with the two Theophrastean treatises on botany (represented here by the paper of Mme Amigues) and the several scientific *Opuscula*. If one feels that all this is merely multiplying questions: there is nothing new about that, certainly not in Ancient Philosophy.

March 1996

JMvO

MvR

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1

A Life in Fragments: *The Vita Theophrasti*

Jørgen Mejer

I. The New Collection of Sources

A new collection of Theophrastean materials was long overdue. The old Wimmer edition of 1854–62¹ contained a mere 190 fragments—including some of the shorter treatises.² Wimmer’s collection offers only two texts from Latin sources and no Arabic texts, nor does it offer any testimonia about Theophrastus’ life. The new collection³ contains texts divided into 741 numbers, of which 67 regard Theophrastus’ life and work; some of the numbered items even provide different versions that are supposed to derive from the same original.⁴ This number does

¹ F. Wimmer, *Theophrasti Eresii opera quae supersunt omnia*, Vols. 1 and 2 (Leipzig 1854), Vol. 3 (Leipzig 1862; repr. Frankfurt a. M. 1964); repr. with Latin translation, Paris 1866 (with later reissues).

² *Deperditorum scriptorum excerpta et fragmenta*, (1866) 321–462.

³ *Theophrastus of Eresus. Sources for his Life, Writings, Thought and Influence*, ed. William W. Fortenbaugh, Pamela M. Huby, Robert W. Sharples (Greek and Latin) and Dimitri Gutas (Arabic), 2 Vols. (Leiden 1992). (Hereafter: “Sources.”)

⁴ E.g. Physics, Doxography on Nature: 227A Simplicius, *In Phys.* 1.2; 227B Diogenes Laertius 8.55; 227C Alex. Aphr. *In Met.* 1.3. In addition, the Appendices

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not include *Opuscula* transmitted from antiquity by continuous manuscript tradition. On the other hand, the new collection includes a number of texts otherwise not available in modern editions, in particular the Arabic sources. The discrepancy between the number of fragments in Wimmer and that of the texts in *Sources* is also due to the fact that Wimmer's ambition apparently was to collect only what he considered genuine fragments or close to *verbatim* reports. The new collection has given up the distinction between fragments *verbis expressis* and testimonia; the numbered fragments in *Sources* include texts, whether direct quotations, paraphrases, or reports, that give information about the thought of Theophrastus and the content of his writings.⁵

The new collection has both a critical apparatus and an *apparatus testimoniorum*. The text is up to date,⁶ and in some cases it has been improved by new readings. The introduction offers a lucid account of the principles according to which sources have been edited. The *index fontium* is very useful and complete. It is regrettable that we have to wait for (full) *indices verborum et nominum* until all eleven volumes have been published.

As we now have this comprehensive collection of sources, we can begin to reconsider the significance of Theophrastus' work. We also have a translation accompanying all these texts. Some may think that it is just another sign of the decline of classical studies that the original texts are not allowed to stand alone,⁷ but it will be realized that a translation also provides an interpretation of the text, and may account for the choice of a particular MS reading or punctuation. On the other hand, the editors' practice of translating their own English texts into Latin and

(Vol. I, 460–65; Vol. II, 600–17) offer material in which Theophrastus is not mentioned explicitly, but which has been attributed to Theophrastus with some plausibility.

⁵ Cf. H. B. Gottschalk, "Prolegomena to an Edition of Theophrastus' Fragments," *Aristoteles, Werk und Wirkung: Paul Moraux gewidmet*, ed. J. Wiesner, Vol. I, 543–56 (Berlin 1985). This paper is important not just for editing Theophrastus, but for any collection of fragments, of philosophical fragments in particular. *Sources* seems to adhere to Gottschalk's principles, except that the editors do not adopt his proposal to use signs to indicate the degree of proximity of alternative versions to the copy-text in the apparatus testimoniorum (553), and that it does give translations, in spite of Gottschalk's objections (556).

⁶ In some cases a new edition of a text was published too late to be used in *Sources* (e.g. Gaiser's and Dorandi's editions of Philodemus, or Keaney's of Harpocration); this can be easily made up for in the forthcoming commentary.

⁷ Though also Wimmer added a Latin translation when he reissued his collection (above, n. 1).

placing these Neo-Latin contributions on the left-hand pages among the original Greek, Latin and Arabic texts (apparently for reasons of symmetry) seems to be questionable. A very useful feature of this collection is the discussion of the titles of Theophrastus' works at the beginning of each section; this gives the reader all the available evidence for each title and for the assignment of fragments to the work in question, with cross-references to the relevant fragments (e.g. 137 FHS&G: List of titles referring to works on Physics). And even if we cannot always identify the particular Theophrastean passages it is certainly a good idea to give the reader a list of the books of the Elder Pliny's *Naturalis Historia* in which Pliny claims that he has used Theophrastus as a source (138 FHS&G). On the whole, the way the new collection brings together the *full* evidence for Theophrastus' work and shows its significance is impressive.

Furthermore, the *nine* volumes of commentary promised by the editors⁸ will give us a major tool in dealing with and understanding the individual fragments. These volumes will also throw light on Theophrastus' contributions to philosophy and to science in general, and give a survey of modern scholarship on the various topics that Theophrastus dealt with.

"Do the new fragments add up to a new whole?" is a relevant question, for the increase of the number of texts available does not necessarily imply an increase of our knowledge of Theophrastus and his scholarship—although the numerous texts presented in *Sources* make us immediately more aware of Theophrastus' influence on later authors and make the perception of him through the ages more obvious. It is doubtful, for instance, that we learn more about Theophrastus' scholarship by reading Heliodorus' poem of uncertain date (139 FHS&G); nevertheless it testifies to the esteem in which Theophrastus was held in late antiquity,⁹ and the cross-references to other fragments offered in the ap-

⁸ The first volume of the commentaries (Commentary Vol. 5) has already appeared: R. W. Sharples, *Sources on Biology (Human Physiology, Living Creatures, Botany: Texts 328–435)* (Leiden 1995).

⁹ The editors, following the latest edition of the text by Goldschmidt (1923), date Heliodorus to the 8th century AD (Index, II.664). His poem *On the Mystic Art of the Philosopher*—meaning alchemy—is dedicated to an Emperor Theodosius, either II (408–50), cf. Schmid–Stählin 2.1067 n. 2, or III (715–17), as the present editors assume. Cf. also H. Hunger, *Die hochsprachliche profane Literatur der Byzantinischen Zeit* I (München 1978) [HdAW 12.5.2] 280.

paratus show that the words which are put into Theophrastus' mouth in the poem are not totally random—indicating that even authors outside the philosophical schools in late antiquity must have had some knowledge of Theophrastus.

The extent to which the new collection does add up to a new whole may be illustrated by a comparison of the section on Theophrastus' physics in the old and the new editions. In Wimmer we find Theophrastus' *Metaphysics* (Fr. 12) followed by 43 fragments dealing with physics and doxography. In some cases a fragment is explicitly ascribed to a particular work by Theophrastus, in other cases no such reference is given. Wimmer clearly structures his collection so that it reflects his own idea about Theophrastus' thinking: Frr. 13 and 14 (= 301B, 252B FHS&G) deal with the role of sensation and the notion of God, while Fr. 15 dealing with the principles of contraries is taken from Theophrastus' *Topics* (= 127A FHS&G); Fr. 16 (= 176 FHS&G) dealing with the creation of things derives from the third book of the *Physics* "or *On Heaven*." Then follow Frr. 17–19 (= 144B, 143, 153C FHS&G) from *Physics* 1 on principles and movement, three fragments from book 2 and 3 of *On Movement* (20 = 153B FHS&G), also about movement, three fragments on place (Frr. 21–23 = 146, 149, 153A FHS&G; Wimmer Fr. 22b is only referred to in the apparatus to 147 FHS&G which offers a better version of the same statement, but not found in Wimmer), while four more fragments from *On Movement* (Frr. 24–26b = 152, 156B, 156A, 155C FHS&G) deal with various aspects of the concept of motion. Fr. 27 (= 301A FHS&G) deals with sense-criteria, Frr. 28–30 (= 241A, 241B, 184 FHS&G) with the creation of the world; Frr. 31–55 contain various doxographica, some dealing with topics already mentioned, some taken from books already referred to.

Turning now to the new collection, the different ordering of fragments, as indicated by the equations above, announces a major difference. This section, called "Physics," has the following subdivisions (subsequent to introductory matters): Principles of Natural Science, Place, Time, Motion and Change, Heavenly Region, Sublunary Region: Elements and Principles, The Eternity of the Universe—then the more specific sublunar topics (Meteorology, Earthquakes and Volcanoes, Metals, Stones, Waters, Salt and Soda) and finally Doxography on Nature (corresponding to Wimmer 31–55, cf. below). Though the editors, as Wimmer did, rightly have decided against an ordering strictly accord-

ing to known titles,¹⁰ the information given at the beginning of the section gives a clear synopsis of the extent to which the content of individual works can be reconstructed, and they generally give the fragments of each work in the order indicated by the book numbers as referred to by the sources. The new collection seems at first sight to offer the same number of fragments as Wimmer, but in fact the 43 numbers dealing with physics in general offer 56 different texts, several of which are absent from Wimmer.

Now, if we look just at the first fragments concerning physics, those on the general principles (142–45 FHG&S) and on place (146–49 FHG&S), it becomes even more evident that the texts which have been added as well as the extended context which *Sources* offer,¹¹ demonstrate how Theophrastus in his *Physics* engaged in a discussion with Aristotle, filling out gaps in the Aristotelian presentation and stating his own views on a number of points. The new collection confirms the remark by Wehrli: “Anderseits bringt die aporetische Darstellungsform wiederholt Zweifel an den spekulativen Elementen der Vorlagen zum Ausdruck, was der empirischen Gesamttendenz von [Theophrasts] Naturlehre entspricht.”¹² I am convinced that *Sources* will confirm that Theophrastus, in this as in other areas, is a philosopher well worth dragging out of Aristotle’s shadow, and that this new collection of fragments in fact will force us to do so.

A much more complicated question is raised by the new arrangement of the fragments in the section called “Doxographica physica” (224–45 FHS&G). It is certainly an improvement on the arrangement in Wimmer’s edition, but is it also an improvement on Diels’ arrangement in *Doxographi Graeci* 475–95? Diels printed the fragments basically in the order of Hermann Usener (*Analecta Theophrastea* [Leipzig 1858])

¹⁰ Cf. Introduction (7–8) and compare Gottschalk 1985 (n. 5 above).

¹¹ The significance of the context is often neglected in collections and interpretations of fragments; this is a problem scholars have come to deal with seriously only recently, cf. Gottschalk 1985, 551; for two stimulating studies on particular sources, see C. Osborne, *Rethinking Early Greek Philosophy. Hippolytus of Rome and the Presocratics* (London 1987) and J. Mansfeld, *Heresiography in Context. Hippolytus’ Elenchus as a Source for Greek Philosophy* (Leiden 1992) [*Philosophia Antiqua* 56]. —Cf. also below, n. 53.

¹² F. Wehrli in *Die Philosophie der Antike*, Band 3: *Ältere Akademie. Aristoteles-Peripatos*, ed. H. Flashar, 480 (Basel and Stuttgart 1983).

“non quo omnia eum recte ordinasse credam sed quia putidum duco in leviculis vel dubiis ab egregio exemplari recedere” (*Doxogr. Gr.* 104). Thus, the fragments as printed in *Doxogr. Gr.* must be read with Diels’ discussion of the nature of Theophrastus’ doxographical work in mind.¹³ While Diels was convinced that Theophrastus’ *Opiniones physicae*¹⁴ was the source of all the fragments despite the different titles under which they are quoted in our sources, the synopsis of titles in 137.5–8 FHS&G demonstrates that this is far from certain.¹⁵ Nevertheless, in *Sources* the doxographical fragments are placed in one section, and one may ask: Is this justified? When we look at the *Corpus Aristotelicum* or at various ancient prose authors, it is clear that it was not uncommon to repeat, more or less verbatim, particular phrases or longer passages in different contexts.¹⁶ It seems fair enough, then, to print all these fragments together because they in any case give an overall impression of Theophrastus’ view of his predecessors, even if some of these texts belong elsewhere.¹⁷ As to the *structure* of Theophrastus’

¹³ *Doxogr. Gr.* 102–13.

¹⁴ This is likely to be the correct interpretation of the title Περὶ Φυσικῶν δοξῶν, as shown by J. Mansfeld, “Doxography and Dialectic. The *Sitz im Leben* of the ‘Placita,’” in *ANRW* II.36.4, eds. H. Temporini and W. Haase (Berlin and New York 1990) 3056–229, esp. 3057 n. 1, and “Gibt es Spuren von Theophrasts *Phys. Op.* bei Cicero?,” *Cicero’s Knowledge of the Peripatos* [RUSCH 4], ed. W. W. Fortenbaugh and P. Steinmetz, 133–58, esp. 148–50 and 157 n. 49 (New Brunswick, NJ and London 1989) [= *Studies in the Historiography of Ancient Philosophy* (Assen and Maastricht 1990) 253–55 and 262 n. 49].

¹⁵ Doubts already in P. Steinmetz, *Die Physik des Theophrastos von Eresos* (Bad Homburg, Berlin and Zürich 1964) 334–51 (“Beilage: Theophrasts Physik und ihr Verhältnis zu den Φυσικῶν δοξῶν”). The problems of the allocation of fragments to the *Opiniones physicae* are well presented by Regenbogen, *RE* Suppl. VII (1940) 1535–37.

¹⁶ Cf. e.g. the *Protr.*, the *EE* and the *EN*. In e.g. Diogenes Laertius and Cicero we sometimes find an anecdote repeated several times instead of a cross-reference. Cf. also Dionysius of Halicarnassus *Dem.* 40.

A note here on the statement in 176 FHS&G “διαίρει δὲ ὁ Θεόφραστος ἐν τρίτῳ τῶν Φυσικῶν ἢ Περὶ οὐρανοῦ” It is hard to understand why *Physics* book 3 should have had a separate title, in particular since *On the Heaven* elsewhere is quoted as a separate work (see 159 and 169, and cf. 1.288). It is just possible that Simplicius simply could not remember where he found the passage, or that Theophrastus in fact offered the same analysis in two different books. A similar problem appears in connection with *Phys.* book 5 and *On the Soul* book 2, cf. 137, 1a and 307A.

¹⁷ E.g., 227B has nothing to do with 227A and surely belongs to one of Theophrastus’ literary works; it was correctly placed by Diels in his apparatus because of the similarity of the terms used to describe the relationship between Parmenides and Empedocles. 233 and 237 are also unlikely to come from Theophrastus’ doxographical work. On

Opiniones physicae we have, however, only one or two indications. If we assume, as seems reasonable, that Simplicius in the beginning of his commentary on Aristotle's *Physics* took his information about the early philosophers from Theophrastus' work, the main structural principle of the *Opiniones physicae* was Theophrastus' opinion about the affinity of these doctrines (229 FHS&G *fin.*); within each group of similar theories the sequence seems to have been roughly, but not strictly chronological (cf. Hippon in 225 FHS&G). Recently, Jaap Mansfeld has given a penetrating analysis of Simplicius' presentation of the early philosophers (*In Phys.* pp. 20.29–28.31 Diels) and of Theophrastus' arrangement of the philosophers according to their view on the principles; he has also demonstrated how Theophrastus refines Aristotle and makes changes in the groupings of these philosophers.¹⁸ Mansfeld's analysis seems to have been accepted by the editors of the new collection and the new order of fragments is certainly more satisfying than Diels'. A problem may be raised, however, with regard to the position of 230 FHS&G (on Plato), which also follows Mansfeld's analysis. Simplicius treats Plato in the middle of 227A, associating him with those philosophers who postulate more than one principle but a limited number of principles, i.e. Parmenides (in the Way of Opinion), the Stoics—added by Simplicius—, Empedocles, and the Pythagoreans. Simplicius says:¹⁹ “And Plato posits three causes in the strict sense, the maker and the paradigm and the end, and three auxiliary causes, the matter and the form and the instrument. Theophrastus, however, after giving his ac-

the other hand, Diels Fr. 12 has been transferred, as it should, to a different context (184 FHS&G).

In 226B FHS&G Simplicius claims that Theophrastus ἐν τῇ ἱστορίᾳ referred to rarefaction and condensation (μάνωσις/πύκνωσις) only in connection with Anaximenes. But in 225 FHS&G (also Simplicius) Theophrastus appears to have referred to the very same processes/terms also in connection with Heraclitus and Hippasus. Simplicius points out that Aristotle used these terms about the Presocratics in general. Either the two fragments do not come from the same work, or Simplicius is substituting his own terminology for that of Theophrastus. The two fragments are not found close together in Simplicius' commentary.

¹⁸ Cf. Mansfeld 1989, 138–48 = *Studies in the Historiography of Greek Philosophy* 243–53. Cf. also his paper, “Aristotle, Plato, and the Preplatonic Doxography and Chronography,” *Storiografia e dossografia nella filosofia antica*, ed. G. Cambiano, 1–59 (Torino 1986) = *Studies in the Historiography of Greek Philosophy* 22–83, and J. Wiesner, “Theophrast und der Beginn des Archereferats von Simplicios' Physikkommentar,” *Hermes* 117 (1989) 288–303, esp. 288–92.

¹⁹ I quote the translation in *Sources*, leaving out the parentheses.

count of the others says: ‘After these came Plato, before them in reputation and ability though after them in date’” There is no reason to think that Simplicius with the expression “the others” means “the other natural philosophers” rather than those just mentioned advocating a limited number of principles (who *happen* to be natural philosophers). Furthermore, the way Theophrastus characterizes Plato seems rather to speak against moving Plato away from this context. If it is correct that the meaning of the title Περὶ φυσικῶν δοξῶν is *Opiniones physicae*, Plato need not have been treated as an appendix: we know from 241A FHS&G that he was discussed in this work, and the way Plato is treated in the fragment *De Sensibus* demonstrates that Theophrastus did not avoid this non-chronological arrangement. —To conclude this part of my paper, the new collection of fragments does add up to a new whole, even though *some* parts of this whole may be added up in a different way.

II. The Biographical Tradition

Turning to the texts illustrating Theophrastus’ life and work, 1–67 FHS&G, there are several ways of answering the question: Do the new fragments add up to a new whole? The simple answer is a laconic NO! Nothing is added to our knowledge of Theophrastus’ biobibliography which cannot be read in the best discussion of this topic, viz. Otto Regenbogen’s paragraph on Theophrastus’ life (*RE* Suppl. VII [1940] 1355–70).²⁰ It is probably more clear now than before that Theophrastus had a good reputation until the end of the Middle Ages; an important testimony to the persistently positive attitude towards Theophrastus is Cicero *Acad.* 1.33 (perhaps from Antiochus),²¹ that Theophrastus was an eloquent and noble-minded man—despite the fact that he abandoned the Platonic position that virtue is the only prerequisite for happiness. However, the fairly small number of anecdotes and characteristics which are mentioned in several sources indicates that more often than not the authors are unlikely to have had any direct

²⁰ On the other hand, one important item is missing also from the collection of testimonia in *Sources*, viz. the ancient portraits of Theophrastus; the best of the Roman copies even bears an ancient Greek inscription with his name. Cf. G. M. Richter, *Greek Portraits* (London 1965) 2.176–78 and figs. 1022–30.

²¹ 497 FHS&G. The passage is not quoted in the biographical section, although it is referred to in the apparatus to 51 FHS&G.

knowledge about Theophrastus' life. It is surprising to note how many sayings are attributed to Theophrastus exclusively in Arabic sources,²² though it is impossible to determine how much information about the man himself may be derived from these sources: many of the sayings are quoted elsewhere anonymously or attributed to other personalities, and others look more like excerpts or paraphrases from books by Theophrastus which may but need not tell us much about the author himself. This is of course also the case with most of the sayings quoted in Greek and Roman sources: the fact that a saying is attributed to more than one person may indicate that, from a biographical point of view, it has no particular claim to belong to anybody; nevertheless, it tells us something about how the particular individuals were looked upon in the later tradition.²³ The new collocation of testimonia makes it easier to see how the individual pieces of information fit together or contradict one another—mostly, however, with only meager results as to our knowledge about Theophrastus' life.

The list of passages indicating that Theophrastus was Aristotle's student and successor (10–11 FHS&G) and the list of Theophrastus' disciples and pupils (18 FHS&G) are useful because they are not easy to find elsewhere, but hardly add anything new. It should be noticed, though, that Theophrastus had several students who did not belong to the Peripatetic school: one more testimony to his popularity.

If it has not been clear before, it is now evident that the anecdotes about Theophrastus are deplorably few. This, of course, should come as no surprise to anybody: the main source for the life and work of Theophrastus, in addition to a few hints in his own texts, is the *Life of Theophrastus* in Diogenes Laertius. Of this we have an excellent edition in *Sources*, 1 FHS&G. And this is really a *new* edition because Michael Sollenberger at an early stage of his work saw the inadequacies of Long's text²⁴ and established his own text on the basis of new collations of a number of manuscripts.²⁵ The improvements are evident from the

²² Cf. *Sources* p. 88.

²³ Thus, obviously, in the case of the anecdote about Aristotle's view on Callisthenes and Theophrastus, DL 5.39 = 1.33–38 FHS&G; Diogenes himself points out that this was also said by Plato about Aristotle and Xenocrates and refers to his earlier mention of it (4.6), but the duplication does not seem to bother him in the least.

²⁴ H. S. Long, *Diogenis Laertii Vitae Philosophorum*, 2 vols. (Oxford 1964) [OCT].

²⁵ Cf. M. G. Sollenberger, *Diogenes Laertius' Life of Theophrastus: A Critical*

critical apparatus and especially from some of the titles in the catalogue of Theophrastus' books, but otherwise the new text does not, with one exception (see below, n. 62), change our understanding of Diogenes' biography nor our view of Theophrastus.

Diogenes' *Life of Theophrastus* is not one of his better *Lives*, though, of course, it contains two important documents: the catalogue of Theophrastus' books and his last will. It offers most of the usual topics that make up a *Life* in Diogenes,²⁶ but compared with the *Lives* of Aristotle, Demetrius of Phaleron or Heraclides Ponticus in the same Book 5, Diogenes' *Life of Theophrastus* is disappointing—and this is our main source for Theophrastus' career. The biography proper takes up less than 2 1/2 pages in the OCT. The only sources Diogenes refers to directly are Athenodorus, Myronianus, Pamphile (all in §36), and Favorinus (§41); in the last case he quotes Favorinus as having referred to Hermippus, but Diogenes apparently has not bothered to look up Hermippus himself, as he seems to have done in other *Lives* of Peripatetics in Book 5.²⁷ There are no references to other sources which Diogenes appears to have had access to, and to which he refers in other Peripatetic *Lives*: Demetrius Magnes, Apollodorus, Heraclides Lembus/Sotion, Timon.²⁸ There are two possible explanations for this, which are not necessarily mutually exclusive: (1) Diogenes was not interested in Theophrastus and put his *Life* together rather haphazardly—notice that at least three of the sources referred to are from the 2nd century AD, and must have been well known and easily accessible to Diogenes. If this explanation is correct, we can understand why Diogenes, contrary to his

Edition of the Greek Text with a Translation and Commentary, Diss. Rutgers University, 1984. The main results are summarized in *RUSCH* 2 (1985) 1–7, as an introduction to the reissue of this earlier edition (*ibid.* 10–43); until the publication of the first volume of the commentary on the *Sources*, it is necessary to consult Sollenberger's notes on the text there, pp. 44–62. His views on the manuscript tradition of Diogenes must now be compared with the work of D. Knoepfler, *La Vie de Ménéclème d'Érétrie de Diogène Laërce: Contribution à l'histoire et à la critique du texte des Vies des Philosophes* (Basel 1991) [Schweizerische Beiträge zur Altertumswissenschaft 21].

²⁶ See, e.g. the table in M. G. Sollenberger, "The Lives of the Peripatetics: An Analysis of the Contents and Structure of Diogenes Laertius' 'Vitae philosophorum' Book 5," in *ANRW* II.36.6, 3793–879, ed. W. Haase and H. Temporini (Berlin and New York 1992), here 3803. I owe more to Sollenberger's detailed discussion of Book 5 than may appear from the references in this paper.

²⁷ Aristotle (1, 2), Lyco (67), Demetrius (78), Heraclides Ponticus (91).

²⁸ On Diogenes' sources, cf. J. Mejer, *Diogenes Laertius and his Hellenistic Background* (Wiesbaden 1978) [Hermes Einzelschriften 40].

usual interests, did not include the picturesque description of Theophrastus' appearance when lecturing as described by Hermippus.²⁹ (2) There was little knowledge about Theophrastus' life even in antiquity, perhaps there was not much to tell about Theophrastus because he was a man who preferred to live secluded from the outside world—hence the significance of Diogenes' note on Theophrastus' use of the word σχολαστικός ('scholarly'; literally: free from political and business activities).³⁰ This interpretation has the advantage of agreeing with the characterization of Theophrastus by the Epicureans, that he "spent his whole life in private and (in) philosophy and (in) ignorance of the affairs of monarchs" (27 FHS&G).³¹ This is not contradicted by various reports that Theophrastus had good relations with some rulers (1.13–14 FHS&G, 28 FHS&G), that he spoke before the Areopagus (32AB FHS&G), or that he worked to secure the return of the orator Dinarchus from his exile (30 FHS&G); given the nature of the Athenian society

²⁹ Hermippus Fr. 51 Wehrli = 12 FHS&G. There is no reason to assume that the rather poignant but not very sympathetic anecdote about Theophrastus and his family in 22 FHS&G (based on an unknown source) could have been used by Diogenes. Theophrastus' last will seems to indicate that he was unmarried, and nowhere else do we hear about his having a family. Furthermore, 22 FHS&G has its parallels in anecdotes about other philosophers, cf. the *app. test.* It is worth noticing that Diogenes reports no negative statements about Theophrastus, as those quoted in 31–32 FHS&G.

³⁰ ἐν ταύτῃ τῇ ἐπιστολῇ "σχολαστικόν" ὠνόμακεν. On the interpretation of σχολαστικός, cf. Sollenberger 1992, 3874–76 and A. Dihle, "Philosophie-Fachwissenschaft-Allgemeinbildung," in *Aspects de la philosophie hellénistique*, ed. H. Flashar and O. Gigon, 219–23 (Geneva 1986) [*Entretiens sur l'antiquité classique* 32]; compare also 461 FHS&G. Both Sollenberger's translation "scholastic" and Regenbogen's "Stubengelehrter," however, give the wrong connotation. Notice that Diogenes' remark concludes a section that begins with the statement "Theophrastus was a very intelligent and industrious man" (Sollenberger's translation), and is followed by "Even though he was like this [not necessarily 'of such (repute)'], as Sollenberger translates], he nevertheless went away for a while" My interpretation agrees mainly with Regenbogen 1940, 1359 "mein Alter verträgt nun das Aufschieben und Lässigsein nicht mehr (d.h., es muss nun doch publiziert werden)." Regenbogen's section on Theophrastus' life (ibidem 1355–70) is virtually a commentary on Diogenes' *Life of Theophrastus* and is never consulted in vain.

There is no need to supplement the text of Diogenes with Menagius' αὐτόν. It is not certain that Theophrastus called himself σχολαστικός, even if Diogenes is likely to have interpreted the statement in this way.

³¹ Philodemus *De Rhet.* Fr. 16, 2.277.13–20 Sudhaus; cf. also 26 FHS&G. It is worth noticing that Timon of Phlius, who otherwise did not spare his contemporaries, apparently did not deal with Theophrastus in his satirical poem: Theophrastus life-style may not have been an inviting target, cf. A. A. Long, "Timon of Phlius: Pyrrhonist and satirist," *PCPS* 204 NS 24 (1978) 68–91, esp. 79.

(which was small and intimate) and the legal system, such participation in public life by famous intellectuals, in particular those famous for rhetorical studies, is to be expected.³²

Whatever the explanation of Diogenes' paucity of information on the life of Theophrastus, our (lack of) knowledge about the lives of ancient personalities must be discussed in the context of two more general questions: Which sources were available to an ancient biographer? And: how reliable is the information we find about the lives of philosophers in ancient biographical sources?

If we look at the cases when ancient biographers refer to their sources, we find that in most instances they refer to other literary texts, whether other biographical works,³³ memoirs (e.g. Antigonus), various kinds of surveys and catalogues (e.g. Callimachus' Πίνakes), or collections of random notes (e.g. Favorinus or Pamphila). Of course, in the case of some great leaders, like Caesar, there must have been a considerable amount of material to draw on though Plutarch in his *Life of Caesar* does not bother to refer to many sources; apart from Caesar's own works and Cicero (no titles) only Asinius Pollio and Livy are explicitly mentioned. Suetonius, however, had access to many more sources and must have read many of the speeches delivered by Caesar, Cicero and others, and obviously knew the Latin literature of the period very well. Nevertheless, here again many pieces of information are given without references to his sources, and the only documentary sources mentioned are the collection of edicts published by Caesar's consular colleague of 59, Bibulus, some "libelli circum tribum missi" (though in a general form and not verbatim), and the letters of Cicero. Suetonius does not indicate why his account of the Catilinarian affairs differs so much from Sallust's, though he sometimes indicates that alternative versions to his

³² Wehrli (commentary to Phanias Fr. 4) also pointed out that Theophrastus may have been politically more active before his exile from Athens than after—that would support a late date for the letter to Phanias, cf. 21–22 below.

It is unlikely that the two passages from Plutarch (33AB FHS&G), implying that Theophrastus (and Phanias) twice liberated his fatherland from tyrants, are historically true. Whatever Phanias may have done (cf. Wehrli ad Phanias Frr. 6–7), we have no information that Theophrastus ever returned to live in Eresus once he had left for Athens.

³³ By this term I mean not just biographies proper, but also surveys like Philodemus' Σύνταξις, Apollodorus' Χρονικά, or Demetrius of Magnesia' Περί ὁμωνύμων ποιητῶν καὶ συγγραφέων.

own account did exist. In fact, his main sources seem to have been literary works by Caesar's contemporaries.³⁴

In general, it is quite clear that unless a given personality was described by himself in his own literary works, or by his contemporaries, usually in literary works,³⁵ there was little to say about him. This impression is confirmed when we look at the preserved biographies of literary figures: most of the biographical material about Greek authors seems to go back to passages in their own literary/fictional works, passages taken out of context and applied to their author, even if the text was part of a drama or a poem in which the author did not speak in his own person.³⁶ This is not surprising, for when a person in the ancient world had died, most of the material which is used by modern biographers was not available: private papers and letters quickly disappeared,³⁷ official documents like birth-, marriage- and death-certificates, or records of court proceedings did not exist or, even if they did, were not easily accessible.³⁸ Although inscriptions may have preserved the names of some public figures for posterity (politicians and statesmen, but also winners of competitions, authors, and philosophers), they were not often quoted in ancient biographies.³⁹ Biographical informa-

³⁴ Cf. A. Wallace-Hadrill, *Suetonius, The Scholar and his Caesars* (London 1983) 59–66.

³⁵ Needless to say, in some cases the authors of biographies who did not live much later than the subject of their biography may also have relied on oral reports; this seems to be the case when Hermippus, according to Favorinus, says that Theophrastus in his old age was carried around in a litter, this being something which Arcesilaus had told his fellow-Academic Lacydes (DL 5.41). Since neither Arcesilaus nor Lacydes appear to have written literary dialogues or memoirs, Hermippus seems to rely on what he has heard. For another example, cf. Gaiser (below, n. 42) 107–8.

³⁶ On this topic, cf. J. A. Fairweather, "Fiction in the Biographies of Ancient Writers," *Ancient Society* 5 (1974) 231–75; M. R. Lefkowitz, *The Lives of the Greek Poets* (London 1981) with further bibliographical ref.; J. A. Fairweather, "Traditional Narrative, Inference and Truth in the Lives of the Greek Poets," *Papers of the Liverpool Latin Seminar* 4 (1983) 315–69. —Needless to say, philosophical books must have contained far less material from which biographical details could be extrapolated.

³⁷ Unless we are so lucky as to find a garbage pile of private files and documents in the sands of Egypt.

³⁸ The preservation of the official indictment of Socrates in the archives in Athens as late as the 2nd century AD is surely extraordinary, cf. DL 2.40. On last wills in Diogenes Laertius, cf. 24 below.

³⁹ Aristotle and his pupils collected evidence from inscriptions in their lists of Olympian and Pythian victors and of winners of dramatic competitions and in their *Didascaliae*, cf. Fr. 615–30 R³ and Wehrli 1983, 287; Aristotle, rather than the actual inscriptions, seems to be the source of such information for later writers.

tion must have been transmitted mainly by oral tradition and can only have been kept alive as long as family and friends were interested in doing so—unless it was included in a biographical or other literary work.

That most of the sources quoted by ancient biographers are biographies (or, in any case, literary works) seems to be confirmed by those few instances where the fragments of early biographers give us enough (though not much) evidence as to their sources.⁴⁰ Hermippus had ties to Callimachus/Alexandria and perhaps Athens, and he must have had access to many sources; in his fragments we find references to a number of authors about whom we know little (Frr. 8, 10, 73–74 Wehrli).⁴¹ We cannot even tell whether Hermippus knew them directly. It may be noticed that he seems to get (support for) his information about as recent a philosopher as Epicurus from Timon's *Silloi* (Fr. 60 Wehrli), and that his claim that Demosthenes had been a student of Plato (Frr. 71–72 Wehrli)⁴² was based on some anonymous *hypomnemata* (presumably in the sense of “literary monograph,” perhaps even Mnesistratus’ book mentioned in n. 42). —We find a similar situation if we turn to a later author whose sources we are able to check, viz. Philodemus. The two sections of his large *Σύνταξις τῶν φιλοσόφων* on the Academics and the Stoics refer to numerous sources, but most of them are biographical

⁴⁰ A particularly intriguing case is the story of Socrates and his wives which goes back at least as far as Aristoxenus (Frr. 54 and 57–58 Wehrli); whether or not it is true, the means of contradicting the story less than hundred years after Socrates’ death must have been few and hard to find. Cf. L. Woodbury, “Socrates and the Daughter of Aristides,” *Phoenix* 27 (1973) 7–25.

⁴¹ The reliability of these “sources,” of course, is not improved if we assume that Hermippus invented the names of some of these authors, cf. F. Wehrli, *Die Schule des Aristoteles*, Suppl. 1 (Basel 1974) 104 and his commentary to the individual fragments.

⁴² Though it seems likely that Demosthenes knew Plato, the evidence for his studying with the philosopher is slim; the relevant texts with commentary are collected in H. Dörrie, *Der Platonismus in der Antike*, Band 2: *Der hellenistische Rahmen des kaiserzeitlichen Platonismus* (Stuttgart and Bad Cannstatt 1990), under Nr. 51. Diogenes states at the end of his list of Plato’s students “Sabinus quotes Mnesistatus of Thasus in Book 4 of *On Materials for Rhetorical Exercises* and says that Demosthenes [also was a student of Plato]. This seems likely” (3.47). The desire to connect Plato and Demosthenes seems to have sprung from a comparison of the style of the two authors. It is only to be expected that Demosthenes does not appear in the regular lists of Platonic students, cf. K. Gaiser, *Philodems Academica. Die Berichte über Platon und die Alte Akademie in zwei herkulanensischen Papyri* (Stuttgart and Bad Cannstatt 1988) [*Supplementum Platonicum, Die Texte der indirekten Überlieferung* 1] 443–49.

or historical works belonging to a period later than the first generation after Plato's death, in which several books on Plato were written. Even though Philodemus does offer much of high value to us, this situation demonstrates once more the scarcity of direct evidence for the lives of ancient philosophers.⁴³ In any case, we must not take the frequency with which a biographical detail appears in ancient texts as indicative of its reliability; for instance, when Diogenes' biography of the Sceptic Pyrrhon (9.61–73) agrees with some of the fragments of Timon's *Silloi*, this is more likely to imply that Diogenes used Timon's poem as his source than that these two sources independently confirm the trustworthiness of various pieces of biographical information.⁴⁴

As mentioned above, other sources than Diogenes Laertius do not give us any important details about Theophrastus. The only way of testing whether there was more biographical material about Theophrastus to be found before Diogenes is to look at Cicero, though Cicero, surprisingly enough,⁴⁵ does not offer much biographical material (not even anecdotes or *sententiae*) about Greek philosophers. Cicero often refers to Theophrastus' opinions and works, but only gives us a few items on Theophrastus' life.

- 1) The prostitute Leontium, an Epicurean, wrote critical books against Theophrastus (*De Nat. Deor.* 1.33.93 = 61A FHS&G). For a possibly positive view, one is reminded of the contemporary Epicurean characterization of Theophrastus in Philodemus, cf. 11 above.
- 2) Theophrastus bemoaned the death of his friend Callisthenes and was distressed by the success of Alexander, saying that Callisthenes had met a man of supreme power and fortune, but did not know how to handle prosperity (*Tusc. Disp.* 3.10.21 = 505 FHS&G). —This is likely to be based on Theophrastus' own work on Callisthenes, which Cicero had read, cf. *Tusc. Disp.* 5.9.25, and see 504 and 1.123 FHS&G. Another instance of biographical information extrapolated from the literary work of a personality.
- 3) While in Athens, Theophrastus "asked a little old lady how much she would sell a certain item for. She answered, and added: 'Foreigner, it is

⁴³ On Philodemus and his sources, cf. Gaiser 1988, 87–133 and T. Dorandi, *Filodemo. Storia dei filosofi: Platone e l'Accademia (PHerc. 1021 e 164)* (Napoli 1991) 83–99. Notice that the main source for Philodemus' chronology seems to be Apollodorus' poem *Chronika*.

⁴⁴ Cf. A. A. Long 1978, 69–70.

⁴⁵ To his credit, Cicero seems more interested in philosophical problems than in the lives of philosophers. It must have been part of his general literary strategy to offer many more anecdotes about Roman characters than about the Greeks.

not possible (to sell it) for less.' It annoyed him that he did not escape the appearance of being a foreigner, although he spent his life in Athens and of all people spoke excellent (Attic Greek)" (*Brutus* 46.172 = 7A FHS&G; translation as in *Sources*). Quintilian is likely to have written his more elaborate version (7B) on the basis of Cicero. —There is no way to identify the source of this incident, but its unique content makes it likely that it is more than just biographical fiction.

- 4) Cicero reports the last words of Theophrastus *Tusc. Disp.* 3.28.69 = 34A FHS&G—for the sake of comparison I quote (from *Sources*) the alternative version of Diogenes Laertius (1.52–59 FHS&G) in a parallel column:⁴⁶

Cicero

However, as Theophrastus was dying, he is said to have reproached nature because she had given stags and crows a long life, to whom it is of no interest, (while) to men, to whom it was of great interest, she had given such a short life; and if their lifetime could have been longer, it would have been the case that when all arts had been perfected, the life of men would be polished by all learning. Therefore he was complaining that he was dying just when he had begun to understand those things.

DL

They say that when he was asked by his students if he had any command, he said that he could command nothing, except that "Life greatly depreciates many pleasures on account of glory (and does so wrongly), for no sooner do we begin to live⁴⁷ than we die. Nothing, therefore, is more profitless than love of glory. But farewell, and either forsake my teaching—for there is much labor—or champion it well—for the glory is great. The empty part of life is more than the advantageous. I am no longer allowed to determine what must be done. You consider what must be undertaken."

It cannot be denied that the two versions differ: Diogenes' version seems connected with the *sententia* attributed to Theophrastus in Diogenes just before the passage quoted, 1.44–45 FHS&G: "And he constantly used to say that life is a costly expenditure." Yet both versions testify that Theophrastus found the life of man less than satisfying, and Cicero in the final sentence seems to be aware of the opinion ex-

⁴⁶ The fact that Arabic texts (34B FHS&G) have a version similar to Cicero's indicates that it was also found in a Greek source. —As for the problematic character of this episode, cf. W. W. Fortenbaugh, *Quellen zur Ethik Theophrasts* (Amsterdam 1984) 237–40.

⁴⁷ This (1.54 FHS&G) is one of the few instances where one may disagree with Sollenberger's—and most other editors'—text. All the manuscripts give the imperfect tense of the verb, not the present. The imperfect may be defended as the *lectio difficilior*, cf. Kühner-Gerth I.134–35 and II.451 Anm. 5; it is, on the other hand, difficult to see why anyone should have changed the present tense to the imperfect.

pressed in the beginning of Diogenes' version. While Cicero's version⁴⁸ deals with life in a cosmic context, Diogenes' is more concerned with social life—and Theophrastus' own students. We shall never know which version, if any, is the more reliable, but both seem to be based on a more or less identical view of Theophrastus.⁴⁹

All in all, the only new significant piece of information on Theophrastus' life in Cicero is the story about Theophrastus and the old Attic woman. Thus, there is little extant evidence to suggest that there may have been significantly more to know about Theophrastus' life than what we find in Diogenes' *Life*. Let me therefore take up a few points in his *Life of Theophrastus* that seem to be of particular significance.

III. On Theophrastus' Life

Diogenes does not give any exact dates for Theophrastus' life, only that he was 85 years old when he died (1.46–47 FHS&G). However, Diogenes tells us elsewhere (5.58) that Theophrastus' successor, Strato, took over the school in Ol. 123 = 288–85 BC,⁵⁰ so by combination we arrive at appr. 370 BC as the year of Theophrastus' birth. All other indications as to Theophrastus' lifetime correspond to these dates.

Diogenes says (1.3–5 FHS&G) that Theophrastus had “heard” Plato before he went over to Aristotle and became his student.⁵¹ This is not a

⁴⁸ That Seneca *De brev. vitae* 1.2 attributes to Aristotle a statement similar to what Cicero attributes to Theophrastus, may be no more than a lapse of memory. *Elegia in Maecenatem* 117–18 is a parallel to the statement about the length of life in Cicero, one of the few parallels not included in *Sources*.

⁴⁹ The *Suda* = 2 FHS&G states that Theophrastus “died after becoming worn out from continual writing and then letting up for a few days on account of a student's marriage.” There is no way to decide whether this late story is true, but it is worth noting that it conveys yet another impression of Theophrastus as being a hard-working scholar. According to Hermippus *apud* DL 3.2 and 9.43 (Frr. 31 and 41 Wehrli) also Plato and Democritus died in connection with a celebration. Diogenes' epigram on Theophrastus (1.48–51 FHS&G) appears to agree with the *Suda*, even though Diogenes does not describe the death of the philosopher: As long as Theophrastus worked hard, he was not crippled, but when he relaxed, he died as a cripple; cf. also the report from Favorinus/Hermippus referred to in lines 61–63.

⁵⁰ Notice that this date comes from Apollodorus (*FGrHist.* 244 F 40) while there is no guarantee that the information about Theophrastus' age also derives from this source. There is no reason to pay attention to what the spurious preface to the *Characters* (not in *Sources*) says about Theophrastus' age.

⁵¹ Diogenes in this passage also says that Theophrastus had heard his fellow-citizen Alcippus in their homeland. Alcippus is only known from this passage. Though

random note that Diogenes happened to find, for he also lists Theophrastus among Plato's students in 3.46–47, and he tells us in 5.2 that Aristotle left the Academy before Plato died. Theophrastus does not appear in other lists of Platonic students, but there is nothing implausible in this piece of information as such. Theophrastus would in any circumstances later be considered Aristotle's student, not Plato's, because of his status as Aristotle's successor.⁵² To move from one school to another was not unusual,⁵³ quite apart from the fact that at the time when Theophrastus supposedly left Plato for Aristotle, nobody need have interpreted this as anything but a younger man (Aristotle) setting up for himself, in another gymnasium.⁵⁴ It is interesting to note that one Arabic

Diogenes seems to mention Alcippus because he thought he had taught Theophrastus philosophy, this need not have been the case.

⁵² Cf. DL 1.15 (9 FHS&G): "(the Ionic branch of philosophy) terminates in Theophrastus in the following way: Aristotle was the student of Plato and Theophrastus was the student of Aristotle."

⁵³ Cf. 16 FHS&G (Arcesilaus deserting Theophrastus; this testimony is probably confirmed by Philodemus *Ind. Acad.* col. 17, 152 Dorandi—not included in *Sources*) as well as *Ind. Acad.* col. 24, 161 Dorandi (the Academic philosopher Metrodorus of Stratonice first heard the Epicureans). The Cynic Metrocles studied, according to his own testimony, simultaneously with Theophrastus and Xenocrates, cf. (Teles apud) Stob. *Anth.* 4.33.31 (p. 5. 813, 14–16 Hense), a text referred to, but not printed in 18.13 FHS&G—showing, again, the importance of having the context of a source.

⁵⁴ Further speculations on Aristotle's departure from Plato's school in A.-H. Chroust, *Aristotle, New Light on His Life and on Some of His Lost Works* (Notre Dame 1973) 1:117–24.

Though it seems rather unlikely that Aristotle left Plato's Academy before the latter died (he was still considered a member in 339), one detail may be used to support such an idea (which, after all, is mentioned for the first time as early as the end of the fourth century B.C.): in Philodemus' description of Plato's death he refers to Philippus the philosopher who was Plato's ἀναγραφὴς καὶ ἀκουστής" (*Ind. Acad.* col. 3.35–39, 133–34 Dorandi). Philippus must have been with Plato in this capacity when the latter died. Elsewhere we are told that Aristotle was Plato's ἀναγνώστης (cf. A. Riginos, *Platonica. The Anecdotes Concerning the Life and Writings of Plato* [Leiden 1976] no. 85). Even though the two Greek terms do not mean the same, it does not seem impossible to suggest that Philippus took over after Aristotle. In any case it is interesting that Aristotle is never said to have been with Plato when he died. But of course, it is also possible that Plato had more than one secretary. According to Philodemus *Ind. Acad.* col. 7.8–10, 137 Dorandi, Menedemus of Pyrrha left the Academy and set up his own school when Xenocrates was elected scholarch, but Menedemus was always considered an Academic philosopher. —It should be noticed that Clitomachus apparently also taught as an Academic philosopher *outside* the Platonic school before he took over the Academy; cf. Philodemus *Ind. Acad.* coll. 24–25, 161–62 Dorandi (from Clitomachus' contemporary, Apollodorus, cf. col. 30, 167 Dorandi).

source (241C FHS&G) also makes Theophrastus a student of Plato. If it is in fact true that Theophrastus had been a student of Plato, the question is: Are there any signs of Platonic schooling in Theophrastus' scholarship? If it is pure fiction the question to ask is: Why and when did somebody want to establish a direct relationship between Plato and Theophrastus?⁵⁵

If we accept that Theophrastus had studied with Plato, Theophrastus must have come to Athens from the island of Lesbos some time before 350/49; he probably left again together with Aristotle for Asia Minor after Plato's death. If so, Theophrastus was one of the earliest of Aristotle's associates. Though we know next to nothing about Theophrastus' life before the death of Aristotle, there is little doubt that he was with Aristotle in Asia Minor and in Macedonia,⁵⁶ until Aristotle returned to Athens around 335 and set up his school. The age difference between the two philosophers was less than 15 years, and they are likely to have had a relationship of colleagues rather than one of teacher/student.⁵⁷ It was therefore not surprising that Theophrastus took over Aristotle's school, when the latter left Athens after Alexander's death in Ol. 114.3 = 322/21 because of the anti-Macedonian feelings (1.5–7 FHS&G); apparently, Theophrastus had no reason to leave Athens and

⁵⁵ Epicurus' student, Colotes, claimed that Aristotle, Xenocrates, Theophrastus and the Peripatetics continued to accept Plato's theory of Forms, cf. Plutarch *Adv. Colotem* 1115A = 245 FHS&G. —Of course, the story about Aristotle deserting Plato may have drawn Theophrastus into a similar situation. In any case, it presupposes the situation that Theophrastus met Aristotle before the latter went to Asia Minor after the death of Plato.

⁵⁶ As we know from Theophrastus' testament (1.310 FHS&G), he owned a house in Aristotle's hometown, Stagira. 28 FHS&G may also be taken to suggest that Theophrastus had stayed in Macedonia.

On Theophrastus, Plato, and the community of Philosophers in Assos, cf. K. Gaiser, *Theophrast in Assos* (Heidelberg 1985) [Abhandlungen der Heidelberger Akademie der Wissenschaften, Phil.-hist. Kl. 1985.3], especially 7–27 with references to previous scholarship.

⁵⁷ We do not know when Theophrastus wrote and published his many treatises. If he did so already when Aristotle was still alive, we may look at his writings not just as supplements to Aristotle's opinions, but also as alternative solutions to problems discussed by Plato and Aristotle. It is certainly possible that Theophrastus' *Epitome of Plato's Republic* (1.107 FHS&G) belong to the earlier part of his life, and his *Metaphysics* exhibits an inclination to discuss Aristotelian as well as Platonic ideas, cf. e.g. A. Laks and G. W. Most (eds.), *Théophraste Métaphysique* (Paris 1993) XXVI–XXVII.

T. Dorandi, in his comments on this paper in Leiden 1993, called attention to Philodemus *De rhet.* PHerc. 832, col. 53.7–20 = 594 FHS&G, which describes the cooperative efforts of Aristotle and Theophrastus.

could take care of things there while Aristotle was away—and he eventually took over as scholarch. It is important to notice that Aristotle does not mention his books in his testament; they obviously remained in the possession of Theophrastus, perhaps because they—and eventually also Theophrastus' books—were considered part of the intellectual environment in which the Peripatetic school exercised its activities; this suggestion may help to explain that there was some uncertainty as to the authorship of individual treatises at least until Nicolaus of Damascus, e.g. the six books *Aristotelian or Theophrastean Hypomnemata* in Diogenes' list.⁵⁸

There is little reason to accept the fancy story in Aulus Gellius 13.5.1–12 = 8 FHS&G about how Aristotle selected Theophrastus as his successor; this story seems to imply the existence of an organized school, which is not likely to have existed before Theophrastus some years after Aristotle's death acquired property with the assistance of his fellow student, Demetrius of Phalerum. Neither Aristotle nor Theophrastus were Athenian citizens and hence were not allowed to own property in Athens. It was only when Demetrius was sole ruler of Athens, 317–307, that Theophrastus was given permission to own land.⁵⁹

That the close relationship between Theophrastus and Demetrius caused some resentment is probably to be seen from the episode which must have taken place shortly after Demetrius' removal from power in 307, viz. Sophocles' law that no philosophers were allowed to be in charge of a school unless approved by the authorities (1.22–29 FHS&G). Theophrastus (and other philosophers) left Athens but were able to return the next year when the law was declared invalid.

⁵⁸ 1.237 FHS&G. Notice also that Philodemus attributed the Ps.-Aristotelian *Oeconomica* to Theophrastus, cf. e.g. M. Gigante, *Philodemus in Italy. The Books from Herculaneum* (Ann Arbor 1995) 39.

⁵⁹ Thus, Theophrastus is the real founder of the Peripatetic school as an educational institution, cf. John Lynch, *Aristotle's School. A Study of a Greek Educational Institution* (Berkeley 1972) 97–105. It is to Diogenes Laertius' credit that he does not mention any appointment by Aristotle. Since this is also mentioned in Arabic texts (3A and 4AB FHS&G), there can be no doubt that Diogenes could have found this piece of (mis)information in one of his Greek sources.

Note that the Athenians did not deprive Theophrastus of his property after the removal of Demetrius. This makes it likely that one of the main reasons for the repeal of Sophocles' law was the respect for or popularity of Theophrastus; another instance of the respect he enjoyed was the outcome of Agnonides' indictment of him on the charge of impiety sometime between 319 and 316: Agnonides was defeated by a large majority, cf. 1 FHS&G line 14–15.

Theophrastus is the only philosopher whom we know by name to have been affected by Sophocles' law.⁶⁰

Diogenes §37 (1.16–21 FHS&G) contains three notes which all seem to deal with Theophrastus as a scholar and teacher. The information that 2000 students came to Theophrastus' school is surely meant to indicate the number of students that came to the school during Theophrastus' entire career.⁶¹ Then follows a passage from a letter to Phanias (Fr. 4 Wehrli), introduced by Diogenes' own statement that Theophrastus talked about his lecture-hall (περὶ δεικτηρίου).⁶² Regenbogen (1940, 1359) is probably right when he interprets it as part of an epistolary discussion between Phanias and Theophrastus about the right moment of publishing a lecture; Theophrastus agrees that each time one lectures on a topic the lecture/manuscript is improved, but remarks that his age⁶³ prevents him from postponing, presumably the publication, any longer. —Though we also find Aristotle concerned with the nature and effect of lectures,⁶⁴ these remarks are probably a sign of the more institutionalized school of which Theophrastus was the master, cf. his remark about the stoa and the geographical maps in his last will, DL 5.51 (1.301–4 FHS&G), and his apparent concern about his appearance when lecturing (12 FHS&G); though this story obviously is told with some relish,

⁶⁰ Cf. Lynch 1972, 103–4. It is interesting that Theophrastus remained in Athens despite the anti-Macedonian feelings in 322/21, and that he seems to have been welcomed back when Sophocles' law was repealed. Theophrastus seems to have enjoyed much popularity in Athens, cf. the respect paid to him at his funeral, cf. 1.60–61 FHS&G.

⁶¹ Correctly interpreted by Regenbogen 1940, 1358; also the number of students studying with Isocrates is mentioned in Ps.-Plut. *X Or.* 837C. While Isocrates is said to have had 100 students, the 2000 students of Theophrastus may be both an indication of his popularity and a result of the more institutionalized school. It is impossible to determine whether the imperfect tense used by Diogenes implies anything different from the aorist used by the Suda in 2 FHS&G.

That Theophrastus must have had many students simultaneously is another matter (see 15 FHS&G).

⁶² This (δεικτηρίου) is the correct form of the word if we follow the reading of some of the manuscripts as Sollenberger has demonstrated we should, and the only one which makes sense; the corruption of this rare word to a more common word (δικαστηρίου) is understandable, while not the other way around.

⁶³ I fail to see why the translation “generation” is “much more natural for the plural of the noun,” Sollenberger 1992, 3874, even if most translators take it that way. Though more often than not ἡλικία refers to ‘prime age’, it is also used in the sense ‘old age’ from Homer on, and the plural may be interpreted as an example of the category in Kühner-Gerth I.16 §348.3: “Die Abstrakta werden in der Pluralform gebraucht, wenn einzelne Arten, Fälle, Zustände ... bezeichnet [werden]”

⁶⁴ Cf. *Met. Alpha minor* 3.994b33–995a19.

there is no reason to discount it completely. Finally there is Diogenes' note on the word σχολαστικός, discussed above. It is worth noticing that the last two pieces of information mentioned in Diogenes §37 come from a letter and not from a biographical source.

The two most valuable items in Diogenes' *Life*, the catalogue of Theophrastus' books and his last will, have both been dealt with in several studies since the 1940s;⁶⁵ I have nothing to add to the various suggestions as to their ultimate or intermediary sources (Aristo, Hermippus, Andronicus), or to the main contents of these documents. But a few general remarks about catalogues of books and testaments in ancient biographical sources may help us to understand some aspects of the *Lives* of ancient philosophers, and to determine the extent to which it is likely that Theophrastus' writings were available in the Hellenistic period.⁶⁶

There can be no doubt that a catalogue of Theophrastus' books was published by Hermippus and most likely in his *Life of Theophrastus*.⁶⁷ Catalogues of books must have been a regular feature in biographies of, or in other works about philosophers, indeed Diogenes seems to know (directly or indirectly) of such catalogues from at least Demetrius Magnes (2.57; 8.85), Sotion (2.85; 6.80; 8.7), Panaetius (2.85; 7.163), Thrasyllus (3.56 ff.; 9.45ff.), Sosicrates (2.84; 6.80; 7.163), Satyrus (6.80; 7.163), and Heraclides Lembus (8.7).⁶⁸ Hence there may have been any number of Pre-Andronican⁶⁹ sources in which Diogenes may

⁶⁵ Cf. Regenbogen 1940, 1361–70; P. Moraux, *Les Listes anciennes des ouvrages d'Aristote*, Louvain 1951; I. Düring, "Ariston or Hermippus?," *Classica et Medievalia* 17 (1956) 11–21; A.-H. Chroust, "Aristotle's Last Will and Testament," *Wiener Studien* NS 3 (1968) 90–114; H. B. Gottschalk, "Notes on the Wills of the Peripatetic Scholarchs," *Hermes* 100 (1972) 314–42; Lynch 1972 passim; Sollenberger 1992, 3849–55 and 3859–72.

⁶⁶ S. Amigues in *Théophraste, Recherches sur les plantes I livres 1-2. Texte établi et traduit par S. Amigues* (Paris 1988) XLIII points out that quotations in Athenaeus that do not appear in our text of *Historia Plantarum* indicate that other editions of Theophrastus also existed in the Roman period.

⁶⁷ Cf. Frr. 54–55 Wehrli. Despite Wehrli's arguments in his commentary to these fragments, there is no reason to assume a separate, bibliographical publication on Theophrastus. Regenbogen (1940, 1363–70) is the best discussion of the catalogue of Theophrastus' books and of Hermippus' role in the transmission, but cf. also Moraux 1951 and Düring 1956.

⁶⁸ On the different types of catalogues of books in Diogenes, cf. Moraux 1951, 216–21. On the catalogues in book 5, cf. Sollenberger 1992, 3849–55.

⁶⁹ Moraux 1951 passim has established this, even if Plutarch tells us that the cur-

have found (parts of) his list. The catalogue of Theophrastus' works seems to consist of four or five different lists; since it does not include Theophrastus' *Metaphysics* it is likely to go back to Andronicus and/or his predecessors. It cannot have been taken directly from Hermippus since the title which he, according to the scholium to book 8 of the *Historia Plantarum*, is said to have given to Theophrastus' work, is absent from Diogenes' catalogue.⁷⁰ On the other hand, the combination of individual titles and general, collective titles makes it unlikely that Diogenes' catalogue is taken directly from Andronicus, though the absence of the *Metaphysics* may be taken to indicate that Diogenes' source is earlier than Nicolaus of Damascus who was the first to separate Theophrastus' so-called *Metaphysics* from Aristotle's lectures on metaphysics.⁷¹ This is evident from the scholium at the end of Theophrastus' *Metaphysics*: "Andronicus and Hermippus do not know this book and they have not mentioned it at all in their lists of Theophrastus' books. Nicolaus, however, mentions it in his *Examination of Aristotle's Metaphysics* and says that it belongs to Theophrastus. It contains a few preliminary problems, as it were, of the whole treatise." What this means, presumably, is that Nicolaus realized that the text of Theophrastus' *Metaphysics* which so far had been joined with the text of the Aristotelian metaphysical treatises, in fact was a separate treatise written by Aristotle's successor. We cannot be sure that Nicolaus knew both Hermippus' and Andronicus' lists, since Andronicus may have included references to Hermippus in his own list, cf. also their disagreement about the book divisions of the *Historia Plantarum*. In any case, it is clear that Theophrastus' books were included in Andronicus' discussion of Aristotle's books, and that at least some of his works were transmitted together with Aristotle's. The uneven nature of Diogenes' catalogue of

rent list of Aristotle's and Theophrastus' works in his time was that by Andronicus (*Sulla* 26 = 38 FHS&G).

⁷⁰ The scholium has previously been thought to belong to the end of book 7, but cf. Amigues 1988, XLIII with n. 84.

⁷¹ Cf. Regenbogen 1940, 1366; Laks and Most 1993, IX–XVIII; and M. van Raalte, Theophrastus' *Metaphysics* (Leiden 1993) 10–11. On Nicolaus and his studies of Aristotle and Theophrastus, cf. H. J. Drossaart Lulofs, *Nicolaus Damascenus On the Philosophy of Aristotle* (Leiden 1965) passim. Why and how Nicolaus was able to separate Theophrastus' text from Aristotle's *Metaphysics* is impossible to say. He may have had evidence from yet another copy of the texts, but he may also have studied the *Corpus Aristotelicum* as published by Andronicus, while in Rome; Nicolaus knew his Aristotle well and may simply have been a more careful reader than his predecessors.

Theophrastus' books, the occurrence of alternative titles, and the distinctive differences between this catalogue and that of Aristotle's books in 5.22–27 seem to indicate that there must have been several sets of copies of the two philosophers' works available in the Hellenistic period. What really needs explaining is why Diogenes did not simply choose to copy Andronicus' catalogue of Aristotle's and Theophrastus' books, which cannot have been hard to find (cf. note 69 above). Diogenes' catalogues of Peripatetic books seem to go back to three different sources, and at least in the case of Theophrastus the explanation is likely to be Diogenes' interest in old and rare documents.⁷²

There is nothing to indicate that testaments were included as a regular part of a biography in antiquity. Diogenes' remarks about "finding" them imply as much.⁷³ The other ancient *Lives* of Aristotle which also contain his last will are all later than Diogenes Laertius.⁷⁴ Neither Apuleius' *De Platone* nor any of the other *Lives* of Plato which have some similarity to Diogenes' include Plato's last will; how it got into Diogenes' *Life of Plato* (3.41–43) we do not know, nor do we know where he found the last will of Epicurus (10.16–22).⁷⁵ But it is worth noticing that all the testaments in Diogenes belong to members of those three philosophical schools which were the most stable philosophical institutions in Athens; obviously, the members of these schools had a crucial interest in preserving the documents pertaining to the origin of their schools.⁷⁶ In the case of the Peripatetics, these documents all seem to go back to Aristo of Ceos (Fr. 31 Wehrli), though not necessarily to his biographical works. It is to Diogenes' credit that he chose to include these testaments in his *Lives*, though it is also significant that he does not seem to have used the information contained in them,⁷⁷ except in

⁷² Cf. Mejer 1978, 53–55.

⁷³ Cf. Mejer 1978, 54 and Sollenberger 1984, 3861.

⁷⁴ Hermippus Fr. 46 Wehrli shows that Hermippus knew of Aristotle's last will, but since the information he claims to have found in it does not square with the text of the testament as we know it, it seems unlikely that Hermippus actually quoted the document in his biography.

⁷⁵ Cicero seems to have known (about) Epicurus' last will, cf. *De Fin.* 2.31, 101–2; it was the *raison d'être* for the celebration of Epicurus' birthday within the Epicurean school.

⁷⁶ This is also supported by the fact that Andronicus included Aristotle's last will in his biobibliography (cf. *Vita Marciana* §3 Düring).

⁷⁷ Thus, Diogenes in 5.1 reports, from a certain Timotheus, that Aristotle had a son

5.74, where he states that Lyco's testament in some way is remarkable for its careful and clever arrangement, and that Lyco is to be admired for this also.

The one item in Theophrastus' testament which I want to discuss here is the fact that he takes much care to ensure that the physical property of his and Aristotle's school will be preserved and kept up (something that distinguishes Theophrastus' will from those of Strato and Lyco), and that the school shall be open to all those of his associates who want to participate in philosophical activities. At the same time he gives his books to Neleus (1.298–309 and 310–11 FHS&G). It does not seem likely that Theophrastus by giving his books to one particular of his associates should have wanted to make a move which would make the philosophical activities in the school more difficult (his alleged last words speak against this, cf. 16 above). Since Theophrastus knew of at least one copy of Aristotle's *Physics* outside Athens (cf. below), he cannot have worried about the availability of his own and Aristotle's works. It has been suggested that Theophrastus disposed of his books this way because the conditions in Athens were rather unstable at the time of his death. The story of the miraculous disappearance and recovery of Aristotle's and Theophrastus' scholarly works (37–40 FHS&G) is too well known to be repeated here, but there can be no doubt that it cannot be historically correct, even if it reflects a historical fact (viz. that Hellenistic philosophers seem to have known Aristotle's literary works better than his scholarly works).⁷⁸ There are, as already indicated, too many incontrovertible signs that both Aristotle's and Theophrastus' works on natural history were known and used by Hellenistic scholars.⁷⁹ It should

by Herpyllis, without making it clear that Aristotle's last will demonstrates that he had more than one child. In 5.68 Diogenes says that Lyco presided over the school for 44 years after Strato had bequeathed it to him in his last will in the 127th Ol. This might be thought to derive from Strato's last will, 5.62, but the addition of the Olympiad makes it more likely that Diogenes derived his information from Apollodorus or another biographical source.

Diogenes reports in 4.43 that Arcesilaus left three copies of his last will in three different places and goes on to quote a letter to one of the three recipients of the copies in which this very information is contained. It is impossible to say whether Diogenes' own report was extrapolated from the letter.

⁷⁸ This is of course not to deny that Andronicus and the scholarly activities of the first century B.C. did have decisive effect on the transmission of the two corpora.

⁷⁹ On the transmission of Aristotle's—and Theophrastus'—works, cf. P. Moraux,

not be forgotten, however, that the number of rolls required to hold the combined works of Aristotle and Theophrastus is so large that a complete collection of their books and manuscripts can only have existed in one or two places. Indications of the use and knowledge of one particular work by either philosopher can never be used to argue for the presence of the rest of his works. Two items from the biographical sources seem, for what they are worth, to presuppose the availability of Theophrastus' works. An anecdote about how the Cynic philosopher Metrocles burnt the writings of Theophrastus (DL 6.95 = 17 FHS&G), is, considering the minor role Metrocles otherwise plays in the biographical tradition, likely to be a fairly early story.⁸⁰ Furthermore, the Stoic philosopher Panaetius is said to have always "had Plato, Aristotle, Xenocrates, Theophrastus, Dicaearchus on his lips, as his own writings show" (Cicero *De Fin.* 4.28,79 = 56 FHS&G). Since Neleus was not exactly an important Peripatetic philosopher and only can have been known to a few, and since the story about the disappearance and recovery of Aristotle's and Theophrastus' works is mentioned only by authors living in the first century B.C. (Strabo) or discussing the history of the first century B.C. (Plutarch, in *Sulla*), it seems likely to have been invented in that period in connection with the renewed interest in the writings of the earliest Peripatetics.

Der Aristotelismus bei den Griechen 1 (Berlin and New York 1973) 3–31 with copious references to previous scholarship, and H. B. Gottschalk, "Aristotelian Philosophy in the Roman World from the Time of Cicero to the End of the Second Century AD," in *ANRW* II.36.2, ed. H. Temporini and W. Haase, 1079–1174, esp. 1083–97 (Berlin and New York 1987), also with copious references to previous scholarship. Add P. M. Huby, "The Transmission of Aristotle's Writings and the Places where Copies of His Works Existed," *Classica & Mediaevalia* 30 (1969) 241–57, R. Blum, "Kallimachos und die Literaturverzeichnung bei den Griechen, Untersuchungen zur Geschichte der Bibliographie," *Archiv für Geschichte des Buchwesens* 18 (1977) 2–356 = *Kallimachos. The Alexandrian Library and the Origins of Bibliography* (Madison, WI 1991), and C. Lord, "The Early History of the Aristotelian Corpus," *AJP* 107 (1986) 137–61. —Also one Arabic source (41 FHS&G) implies the existence of works by Aristotle and Theophrastus in Alexandria, though of course this may be based on Athenaeus (40 FHS&G).

⁸⁰ This anecdote must be seen in connection with the preceding paragraph in Diogenes Laertius (6.94), in which Metrocles is said to have been a student of Theophrastus, cf. above note 53. It is obvious from the context in Diogenes that there were two different stories about Metrocles burning books, either his own books or those of Theophrastus, but it is impossible to determine whether either version is trustworthy.

In this context it is worth noticing that while the Museum in Alexandria was claimed to have obtained its copies of the Attic tragedians from Athens, Athenaeus (in the preserved excerpt 1.4, 3A–B = 40 FHS&G) says that Ptolemaeus obtained his copies of the two Peripatetics from Neleus, Athens and Rhodes. At least as far as Aristotle is concerned, Rhodes seems to have played an important role in the transmission. We know that Theophrastus and Eudemus after the return of the latter to Rhodes corresponded about the correct manuscript reading of a passage in Aristotle's *Physics* Book 5 (Fr. 6 Wehrli = 157 FHS&G), and that Eudemus also had a copy of Aristotle's *Metaphysics* (Fr. 3 Wehrli). Theophrastus' student Praxiphanes seems to have been active on Rhodes (cf. Wehrli ad Prax. Frr. 1–2), and from here came also the Peripatetic Hieronymus (cf. Wehrli ad Hier. Fr. 1). We also know that Panaetius and Posidonius, two scholars with close ties to Rhodes, were familiar with the two Peripatetics, and it thus seems no coincidence that it was Andronicus of Rhodes who took upon him to reorganize their works—perhaps because he had access to additional copies of their works, as may be implied by the expression used by Plutarch (*Sulla* 26.2 = 38 FHS&G): καὶ παρ' αὐτοῦ τὸν Ῥόδιον Ἀνδρόνικον εὐπορήσαντα τῶν ἀντιγράφων εἰς μέσον θεῖναι ..., where the genitive seems to indicate that εὐπορήσαντα means more than just “obtaining the use of copies from him” (in this sense the verb usually takes the accusative). If Strabo's account of the same event (*Geogr.* 13.1.54 = 37 FHS&G) is to be trusted, it seems unlikely that Andronicus would have been able to provide a better basis for the study of Aristotle's and Theophrastus' works if he had access to nothing more than the copies of Apellicon and Tyrannion. Certainly, Rhodes must have been a center of both philosophical and rhetorical studies and must have been well supplied with books in the Hellenistic period.⁸¹

In conclusion, I would say that we may be disappointed not to know more about the life of Theophrastus. But the new collection of frag-

⁸¹ Since around the middle of the 2nd century B.C. Rhodes must have had a good public educational system, cf. F. della Corte, “Rodi e l'istituzione dei pubblici studi nel II secolo a. C.,” *Atti della Accademia delle Scienze di Torino* 74.2 (1939) 255–72, and at the same time the city also seems to have had several good libraries, cf. Blum 1977, 249–55 and (for a new library inscription) I. Papachristodolou, *Dodekanesiaka Chronika* 2 (1986) 265–71. In this period the grammarian Dionysius Thrax also chose to establish his school here; Panaetius was one of his students, cf. P. Fraser, *Ptolemaic Alexandria* (Oxford 1972) I.469–70 and II.678 n. 207. Thus, Rhodes offered all the necessary requirements for doing what Andronicus in fact did.

ments demonstrates clearly that the tradition concerning Theophrastus' life does contain certain features that distinguish it from that of other philosophers, and that the few preserved anecdotes do give us a fairly consistent impression of Theophrastus. The fragments concerning Theophrastus' life and philosophy now collected in *Sources* call for a new assessment of Theophrastus and his influence on Hellenistic philosophy, as is clear from the papers presented in this volume.⁸²

⁸² I am, as so often before, grateful to cand. mag. Vibeke Ingemann for improving on the argument and the text of my paper. My editor, Dr. Marlein van Raalte, has with her usual sagacity and thoroughness suggested numerous improvements on both the content and the style of my manuscript, most of which I have adopted with gratitude. Any remaining deficiencies are my own.

2

Qualche aspetto della vita di Teofrasto e il Liceo dopo Aristotele

(Comments on Professor Mejer's Paper)

Tiziano Dorandi

La risposta che il Professore Mejer dà alla domanda che è stata scelta quale titolo della nostra Conferenza di Leiden: “Do the new fragments add up to a new whole?” (sopra, 1–28) è sostanzialmente negativa. La sezione biografica della raccolta delle fonti su Teofrasto non aggiunge niente di nuovo alla ricostruzione che della vita del successore di Aristotele era stata presentata da Otto Regenbogen nel 1940.¹ Anche la nuova edizione del testo della *Vita Theophrasti* di Diogene Laerzio (1 FHS&G) non modifica in misura concreta le nostre conoscenze sul primo scolarca del Liceo. Ciò che si guadagna, semmai, da queste testimonianze è piuttosto un quadro rinnovato della posizione e dell'influenza che Teofrasto ha avuto nel contesto delle filosofie ellenistiche.

Nelle poche pagine del mio commento vorrei provare a essere un po' più ottimista.

Sono d'accordo con Mejer che Regenbogen ha tracciato un profilo

¹ O. Regenbogen, “Theophrastos,” *RE Suppl.* VII (1940) 1353–70.

biografico di Teofrasto eccellente per i tempi in cui scrisse la sua monografia, ma sono altresì convinto che il progresso degli studi, e non solo su Teofrasto, può aiutare a avanzare nella comprensione di aspetti ancora oscuri della sua vita nonché contribuire alla definizione della storia esterna del Liceo in un momento cruciale della sua esistenza.

Prima di tutto un paio di osservazioni preliminari.

A Diogene Laertio initium. Per il *bios* di Teofrasto di Diogene Laerzio possiamo contare sulla moderna edizione approntata dal Sollenberger, che sostituisce egregiamente quella alquanto difettosa del Long. Tra le novità che la caratterizzano vorrei richiamare soprattutto quelle che riguardano il catalogo degli scritti di Teofrasto: qui l'Editore rifiuta, a ragione, le proposte di atetesi di titoli avanzate da critici troppo razionalizzanti dei secoli scorsi e presenti nel testo del Long. La immetodicità di chi espunge alcuni titoli considerandoli doppioni è evidente solo che si consideri la corretta spiegazione di Usener che l'attuale catalogo degli scritti di Teofrasto risulta composto di quattro parti: le prime due in rigoroso ordine alfabetico (cioè secondo l'ordine delle prime lettere dei titoli), la terza senza ordine, la quarta di nuovo alfabeticamente: un catalogo principale, dunque, con tre appendici.²

Un grave svantaggio per la ricostruzione della biografia di Teofrasto è da imputare, senza dubbio, alla mancanza del libro della *Rassegna dei filosofi* di Filodemo dedicato al Peripato. Di questa opera filodemea si conservano, come è noto, ampie sezioni soltanto dei libri relativi all'Academia e alla Stoà. Negli ultimi anni è risultata sempre più palese l'importanza del contributo di Filodemo alla storia esterna di quelle scuole perché fondato su fonti di primaria importanza, che integrano, in più punti, la tradizione confluita in Diogene Laerzio.³

Nelle restanti opere di Filodemo non mancano allusioni, riferimenti e citazioni da Teofrasto: il caso più evidente è, certamente, quello dell'intero V *Carattere* riprodotto in un libro incerto dell'opera *I vizi e le virtù contrapposte* (*PHerc.* 1457, coll. 6–7) dedicato all'analisi del vizio della piacerterìa (ἀπέσκεια): un rinnovato esame dell'originale, dopo il puntuale commento dello Stein, ha consentito di progredire oltre nella costituzione di quel difficile testo non bene trasmesso dai manoscritti

² Cf. H. Usener, *Analecta Theophrastea* (Bonn 1858) = *Kleine Schriften I* (Leipzig e Berlin 1912) 50–70: spec. 61–64.

³ Cf. T. Dorandi, *Filodemo storico del pensiero antico*, in *ANRW II.* 36.4 (Berlin e New York 1990) 2407–23.

medievali.⁴ Ma vi sono anche testimonianze che riguardano più da vicino la biografia di Teofrasto: un passo della *Academicorum historia* (col. 15.3ss.) integra le nostre informazioni sui rapporti del filosofo peripatetico con il suo discepolo Arcesilao. Secondo il Gaiser,⁵ Filodemo può avere derivato questo giudizio direttamente da Antigono di Caristo, che, a sua volta, si sarebbe fondato sulle *Memorie di Arcesilao* (ἀπομνημονεύματα) composte dal suo discepolo Lacide di Cirene (DL 5.41). Su un altro luogo della *Retorica* relativo alla mutua collaborazione scientifica fra Aristotele e Teofrasto ritornerò fra breve. Il Teofrasto citato, invece, in una colonna ancora della *Academicorum historia* (col. T 1–4 = 740 FHS&G) per istituire un sincronismo utile a definire la cronologia di un certo Diodoro che scrisse su Speusippo, è probabilmente, non il nostro filosofo, ma l'arconte omonimo del 340/39 o meglio del 313/2.⁶

È comunque su un'altra testimonianza papiracea, che gli Editori dei frammenti di Teofrasto, con ammirevole cautela, non hanno inclusa nella loro raccolta, che voglio soffermarmi.

In una colonna molto lacunosa del suo *Commento alle Filippiche* di Demostene, Didimo fa riferimento allo scritto di Ermippo *Su coloro che dalla filosofia sono passati a grandi imprese e potentati* in relazione al tiranno-filosofo Ermia di Atarneo, amico e protettore di Aristotele.⁷ Da altre fonti (Filodemo, Platone e Strabone) sappiamo che Ermia aveva accolto nella sua corte, oltre a Erasto e Corisco, anche altri membri della scuola di Platone, che vi si erano recati dopo la morte del maestro (nel 347). Ermia avrebbe messo a loro disposizione la città di Asso, vicina a Atarneo, e qui i filosofi avrebbero dato vita, se non a una vera e propria scuola istituzionalizzata, almeno a un circolo di studiosi impegnati in una libera ricerca e nella collaborazione a progetti comuni. La ricostruzione del passo di Didimo è ostacolata da gravi lacune, una delle quali riguarda proprio la linea (1.54) dove sembra che il filologo alessandrino riferisse i nomi dei filosofi che erano presenti a Asso da

⁴ Cf. M. Stein, *Definition und Schilderung in Theophrasts Charakteren* (Stuttgart 1992) 76–123 e T. Dorandi e M. Stein, "Der älteste Textzeuge für den ἄρεσκος des Theophrast," *ZPE* 100 (1994) 1–16.

⁵ K. Gaiser, *Philodems Academica* (Stuttgart e Bad Cannstatt 1988) 132 s. Cf. T. Dorandi, *Filodemo, Storia dei filosofi. Platone e l'Accademia* (Napoli 1991) 93.

⁶ Per κατά + nome dell'arconte all'accusativo, cf. Dorandi 1991, 241, comm. a col. Q 4.

⁷ Didym., *In Demosth. Comm.* (PBerol. 9780r), col. 5.52–63 Pearson-Stephens.

Ermia. Leggiamo o ricostruiamo con sicurezza i nomi di Erasto, Corisco e Aristotele, viene poi una lacuna: il Foucart, seguito da Jaeger, vi aveva integrato il nome di Senocrate: Κόρισ[κ[ον] κ(αὶ) Ἑραστον κ(αὶ) Ἀριστοτ[έλην κ(αὶ) Ξενοκράτην] κτλ.; i più recenti editori del papiro didimeo, Pearson e Stephens, hanno preferito restituire la dubbia forma verbale σ(υμ)βιωσομ(έν)ους, riferita appunto ai tre filosofi menzionati prima: Κόρισ[κ[ον] κ(αὶ) Ἑραστον κ(αὶ) Ἀριστοτ[έλην σ(υμ)βιωσομ(έν)ους] κτλ. Indipendentemente l'uno dall'altro, e per motivi affatto diversi, Owen⁸ e Gaiser,⁹ sulla base delle minime tracce di scrittura che il Crönert era riuscito a leggere in quel punto lacero del papiro (ΔΟΤΟ.), hanno suggerito di integrarvi il nome di Teofrasto: Κόρισ[κ[όν] κ(αὶ) Ἑραστον κ(αὶ) Ἀριστοτ[έλην κ(αὶ) Θεόφρ[αστο]ν] κτλ.¹⁰

Owen giustifica questa scelta testuale a partire dalla convinzione che la presenza di Senocrate a Asso, attestata dal solo Strabone (13.1.57), è frutto di una invenzione fondata su una tradizione ostile a Aristotele e all'Academia che presenta tutte le caratteristiche malevole peculiari delle invettive filosofiche (Teopompo?).

Gaiser, a partire da questa integrazione e dalla sua esegesi dei §§ 46–47 del *De igne* teofrasteo sostiene, invece, che quello scritto fu composto dal giovane filosofo durante il soggiorno a Asso nel 347–45. Il *De igne* sarebbe una specie di lezione per uso interno, una relazione che Teofrasto avrebbe svolto su un tema assegnatogli nell'ambito della comunità filosofica di Asso, di poco precedente il così detto IV libro dei *Metereologica* attribuito a Aristotele, ma in realtà opera anche esso di Teofrasto.

Non so quanto tutte le conseguenze che il Gaiser trae dalla ricostruzione del nome di Teofrasto nel passo di Didimo siano effettivamente sostenibili nella loro globalità.¹¹ Riterrei, tuttavia, che la sua proposta di integrazione meriti di essere presa in considerazione non

⁸ G. E. L. Owen, "Philosophical invective," *OSAP* 1 (1983) 3–12.

⁹ K. Gaiser, *Theophrast in Assos* (Heidelberg 1985) 12; 25 n. 20.

¹⁰ Molto più azzardata la proposta di F. Lasserre, *De Léodamas de Thasos à Philippe d'Oponte* (Napoli 1987) 108 (10 T7), che ricostruisce nelle medesime tracce il nome Ξενοκ[ράτη]ν riprendendo la congettura di Foucart.

¹¹ *Contra* A. M. Battezzatore, *Elenchos* 10 (1989) 217–30. Ma vd. W. Lapini, *Latinitas* 37 (1989) 242–57.

ostanti le riserve degli ultimi editori del passo nel *Corpus dei Papiri Filosofici*.¹²

La presenza di Teofrasto a Asso insieme con Aristotele consentirebbe, tra l'altro, di rivalutare appieno la notizia di Diogene Laerzio (5.36) che Teofrasto fu discepolo, oltre che di Aristotele, anche di Platone.¹³

Della stretta collaborazione che caratterizzò alcune ricerche di Aristotele e di Teofrasto è testimonianza in un luogo di un libro incerto della *Retorica* di Filodemo (*PHerc.* 832, col. 53.7–20 = 594 FHS&G):¹⁴

“(Aristotele) come non avrebbe potuto ingenerare grande ammirazione delle sue capacità dal momento in cui abbandonò il suo proprio soggetto e si mise a raccogliere insieme con il suo discepolo (Teofrasto) leggi e tante costituzioni e norme giuridiche riguardanti i territori e le diverse contingenze e tutto quanto (ha a che fare con questo soggetto).”

Il passo è raccolto dagli Editori nella sezione dei frammenti sulla politica, ma la sua testimonianza restituisce anche informazioni utili sul metodo di lavoro dei due filosofi e sull'organizzazione della ricerca scientifica all'interno del Liceo.

Ci sono nella biografia di Teofrasto alcuni episodi che devono essere studiati insieme, nelle loro reciproche relazioni: mi riferisco alla successione di Teofrasto a Aristotele, all'acquisto di una proprietà in Atene, al suo allontanamento da Atene a causa della legge di Sofocle di Sunio e a alcune clausole, infine, del testamento. Sono tutti episodi o momenti che si riallacciano, vedremo, al più vasto e difficile problema della definizione della struttura e della organizzazione delle scuole filosofiche a Atene.

Poche parole introduttive su ciascuno dei singoli punti per poi passare a considerazioni più generali.

Nel 322/21, muore Aristotele: la tradizione antica è concorde nell'indicare quale suo successore Teofrasto. Quanto leggiamo in

¹² Cf. G. Messeri Savorelli, *Corpus Papiri Filosofici* I.1* (Firenze 1989) 383–85 (59T): “(καὶ) Θεόφρα[σ]το[v] suspicatur Gaiser sed vestigiis minime aptum videtur” (384).

¹³ Cf. M. G. Sollenberger, “The Lives of the Peripatetics: An Analysis of the Contents and Structure of Diogenes Laertius’ ‘Vitae Philosophorum’ Book 5,” in *ANRW* II.36.6 (Berlin e New York 1992) 3806s. e n. 48.

¹⁴ Cf. T. Dorandi, “Epicuro contro Aristotele sulla retorica,” in *Rhetoric after Aristotle*, ed. W. W. Fortenbaugh e D. C. Mirhady (New Brunswick, NJ 1993) 111–20.

Diogene Laerzio (5.36):¹⁵ “Quando Aristotele si ritirò a Calcide Teofrasto fu suo successore nello scolarcato (αὐτὸς διεδέξατο τὴν σχολήν)” non è tecnicamente precisa nell’uso del termine σχολή, ma è vicina alla realtà dei fatti nell’asserzione che Teofrasto “sucedette” a Aristotele (αὐτὸς διεδέξατο), che non vi fu cioè una nomina o una indicazione diretta da parte di Aristotele. Un intervento di Aristotele è presupposto, invece, dallo pseudo-Galeno (*De Hist. Philos.* 3 = 11.6 FHS&G) e da Suida (*Lex.* α 3927, s.v. Ἀριστόξευος = F 1 Wehrli); mentre Gellio (*Noct. Att.* 13.5.1–12 = 8 FHS&G) tramanda la storiella secondo la quale Aristotele avrebbe fatto intendere la propria preferenza piuttosto per Teofrasto che per Eudemo. La critica recente ha messo in dubbio l’autenticità della testimonianza dello pseudo-Galeno e di Suida, ma ha supposto un fondo di verità nel racconto di Gellio, nel senso cioè che non è da escludere la possibilità che Aristotele abbia manifestato, seppure in maniera velata, la sua volontà di scegliere Teofrasto come successore.¹⁶

Teofrasto, in quanto meteco, non avrebbe potuto avere a Atene nessuna proprietà immobiliare. La notizia che troviamo in Diogene Laerzio (5.39) che, dopo la morte di Aristotele, il filosofo acquistò un giardino suo proprio (ἴδιος κήπος), con l’aiuto di Demetrio di Falero, si può spiegare supponendo che Demetrio abbia beneficiato l’amico con la concessione del diritto di ἔγκτησις γῆς καὶ οἰκίας.

Di nuovo Diogene Laerzio (5.38), dopo avere riferito il vano tentativo di Agnonide di accusare Teofrasto di empietà, ricorda un’altra battaglia legale cui Teofrasto dovette andare incontro. Nel maggio o giugno del 307 Demetrio Poliorcete aveva liberato Atene dal dominio Macedone e restaurato la democrazia. Demetrio di Falero, che aveva governato Atene per dieci anni in qualità di reggente di Cassandro, fu costretto a abbandonare la città. La commissione dei *nomothetai* incaricati di rivedere la costituzione promulgata dal Falereo, su proposta di Sofocle di Sunio, decretò che nessun filosofo fosse a capo di una scuola senza il permesso del Consiglio e del popolo, pena la morte. Questa legge, che non era rivolta solo contro Teofrasto e i membri del Liceo, aveva come scopo primario quello di far sí che tutte le scuole filosofiche passassero sotto il diretto controllo dello Stato. I filosofi partirono per l’esilio. Pochi mesi dopo, tuttavia, nella primavera del 306, Filone, un discepolo

¹⁵ La traduzione dei passi di Diogene Laerzio è quella di M. Gigante (sotto, n. 28).

¹⁶ Cf. Sollenberger 1992, 3810s.

di Aristotele, accusò di illegalità la proposta di Sofocle; gli Ateniesi abolirono quella legge e multarono Sofocle con una ammenda di cinque talenti; i filosofi, compreso Teofrasto, poterono così rientrare a Atene e riprendere la loro attività di insegnamento.¹⁷

Estraggo dal testamento di Teofrasto solo quei punti che sono rilevanti per il mio discorso:

“In primo luogo dovranno essere completati i lavori per la ricostruzione del Museo con le statue delle dee, e dovrà essere aggiunto tutto ciò che può contribuire ad adornarle e abbellirle; in secondo luogo, l'immagine di Aristotele dovrà essere collocata nel tempio con tutti gli altri doni votivi che prima erano nel tempio. Inoltre il portichetto che mena al Museo dovrà essere ricostruito, non più brutto di prima. Anche le tavole che rappresentano il giro della terra dovranno essere riposte nel portico inferiore” (5.51). ... “A Neleo lego tutta la mia biblioteca. Lego il giardino e il peripato e tutte le case vicino al giardino, a quelli degli amici ... che vogliano rimanendo lì condividere la σχολή¹⁸ e coltivare insieme la filosofia (συσχολάζειν καὶ συμφιλοσοφείν), poiché non a tutti è possibile dimorare sempre lì, a condizione che nessuno alieni questi beni e nessuno se ne serva come cosa privata, ma piuttosto tutti li posseggano in comune come un tempio e se ne servano con solidale spirito di familiarità e di amicizia, come è conveniente e giusto” (5.52–53).

Altresì interessante è, infine, la notizia che Sollenberger¹⁹ ha restituito alla fine del *bios* di Teofrasto sottraendola a quello di Stratone: “Successore di Teofrasto (nello scolarcato) fu Stratone (διεδέξατο δ' αὐτοῦ τὴν σχολὴν Στράτων).”

Come ho accennato sopra, è dalla lettura simultanea e comparata di tutti questi dati che possiamo provare a dare una risposta alle più complesse domande: che cosa era effettivamente il Liceo? Quando e da chi fu fondato come vera e propria scuola istituzionalizzata? E ancora: che funzioni svolgeva nell'Atene del IV sec. a.C.?

Fino a tempi recenti, ha predominato la tesi di Wilamowitz²⁰ secondo cui le scuole filosofiche erano associazioni religiose (*thiasoi*) dedite al

¹⁷ Sulla vicenda, cf. almeno J. Lynch, *Aristotle's School. A Study of a Greek Educational Institution* (Berkeley, Los Angeles e London 1972) 103–21 e, più di recente, C. Natali, *Bios theoretikos. La vita di Aristotele e l'organizzazione della sua scuola* (Bologna 1991) 111–13, 119.

¹⁸ συσχολάζειν: seguo l'esegesi di Natali 1991, 107 e 118 n. 46.

¹⁹ M. G. Sollenberger, “A Note on the Lives of Theophrastus and Strato in Diogenes Laertius 5.57–58,” *CPh* 82 (1987) 228–30.

²⁰ U. von Wilamowitz-Moellendorff, *Antigonos von Karystos* (Berlin 1881; 2nd ed. 1965) 262–91.

culto delle Muse. In quanto tali, le scuole sarebbero state riconosciute dal diritto ateniese, che avrebbe attribuito loro uno specifico statuto di persone giuridiche. Questa ricostruzione è stata revocata in dubbio dal Lynch,²¹ il quale ha messo in evidenza il fatto che non ci sono prove né concrete né dirette che inducano a postulare che le scuole filosofiche fossero organizzate come *thiasoi*. Nemmeno si può parlare di ricorso a questo espediente per ottenere un riconoscimento da parte della autorità statale perché il concetto di persona giuridica era estraneo al mondo greco.²² Si sarebbe trattato, piuttosto, di fondazioni private che niente avevano a che fare con lo Stato e che, pertanto, non avevano bisogno di nessuna autorizzazione per esistere. Meno convincenti appaiono le ulteriori conclusioni del Lynch e cioè che le scuole dei filosofi erano istituzioni secolari con fini educativi rivolte alla promozione di una conoscenza utile.

Tralascio, per ovvî motivi, di discutere la questione per quanto riguarda l'Accademia, a proposito della quale la tesi del Wilamowitz è stata oggetto di una argomentata difesa da parte della Isnardi Parente.²³ La studiosa ha supposto che il ricorso all'espediente giuridico-religioso del *koinon* dedicato alle Muse si sarebbe reso necessario solo in una fase più tarda della sua esistenza, nel momento in cui si prospettò la trasmissione della scuola a uno scolarca povero e meteco come Senocrate.

La situazione e il clima del Liceo sembrano diversi. È stato suggerito, con buoni argomenti,²⁴ che il Liceo sarebbe nato come scuola istituzionalizzata solo con Teofrasto e avrebbe avuto caratteristiche tipiche di una fondazione perpetua, simile in ciò a determinate fondazioni scolastiche e funerarie. Istituito con un lascito ereditario di Aristotele, il Liceo non aveva come fine l'assicurare una educazione ai giovani né un culto delle Muse, ma piuttosto l'attuazione dell'ideale di vita teoretica, del *bios theoretikos*, di quel *συμφιλοσοφείν* che era uno dei modi che Aristotele aveva indicati per trascorrere insieme con gli amici i periodi di *σχολή*, instaurando fra loro un rapporto basato sulla *φιλία* naturale.²⁵

²¹ Lynch 1972, 106–34.

²² Diversamente intende M. Isnardi Parente, "L'Accademia antica: Interpretazioni recenti e problemi di metodo," *RFIC* 104 (1986) 352.

²³ Isnardi 1986, 351–57.

²⁴ Natali 1991, 93–120.

²⁵ Arist. *EN* 9, 1172a1–8 (*σχολή*) e 8, 1159b25ss., 1161a25–30 (*φιλία*).

Ritengo sia possibile fare un ulteriore passo in avanti. Da una più attenta lettura del paragrafo di Diogene Laerzio dove si riferisce la legge contro i filosofi fatta votare da Sofocle di Sunio è stato dedotto che, prima di quella data, non era necessaria una approvazione dello Stato per aprire una scuola filosofica a Atene e tale situazione si ripropose, a partire dall'anno successivo, dopo l'intervento di Filone e il ripristino dello *status quo ante*.²⁶ Appare inoltre indiscutibile il fatto che il Liceo ricevette uno statuto di vera e propria scuola a partire da Teofrasto; Aristotele non aveva pensato a Teofrasto come suo successore ufficiale nella direzione della scuola, ma piuttosto come a colui al quale affidare la continuità del suo insegnamento. Questo compito Teofrasto sente come quello basilare della comunità filosofica che aveva costituito a partire dall'eredità del maestro. Egli stesso, pur proprietario di un giardino suo proprio e di edifici, e fondatore, dal punto di vista giuridico, del Liceo come scuola istituzionalizzata, non nomina uno scolarca ufficiale come suo successore. Il fatto che Diogene Laerzio, per indicare la successione sia di Teofrasto a Aristotele sia di Stratone a Teofrasto, ricorra alla formula διεδέξατο τὴν σχολήν, non può essere addotto come prova contraria: si tratta, infatti, di una formula ormai stereotipa e canonica nella lingua della letteratura delle *diadochai*. Il Liceo si dà regole precise di organizzazione interna solo a partire da Stratone—il primo peripatetico, tra l'altro, che nomina personalmente il suo successore nel proprio testamento (DL 5.62)—e soprattutto con Licone a quanto testimonia la dettagliata descrizione di Antigono di Caristo tramandata in Ateneo (12, 547D–E = F 7 Wehrli).

Sarebbe un errore considerare la storia del Liceo, e insieme quella delle altre scuole filosofiche, in una visione monolitica, senza tenere conto di una loro evoluzione interna, che non fu solo di crescita, ma anche di mutamento e di decadenza.

Un'ultima osservazione, infine—e questo è l'unico caso in cui mi permetto di dissentire, non con argomentazioni mie, da una interpretazione del Mejer.

Mi riferisco alla lettera di Teofrasto a Fania (DL 5.37 = F 4 Wehrli) e, più in particolare, al significato dell'aggettivo σχολαστικός. Mejer ritiene—al séguito del Regenbogen—²⁷ che σχολαστικός si riferisca a

²⁶ Lynch 1972, 117. *Contra*, Isnardi 1986, 353 n. 1.

²⁷ Regenbogen 1940, 1359.

Teofrasto e significhi “a man of studies”: “Stubengelehrter” aveva tradotto il Regenbogen. A favore di questa esegesi Mejer (sopra, 11) richiama il fatto che essa avrebbe il pregio di aderire con le critiche mosse a Teofrasto da Filodemo in un passo del III libro della *Retorica* (*PHerc.* 240, Fr. 16.3–10 = 27 FHS&G): “Teofrasto passò tutta la sua vita in privato e nella filosofia e nell’ignoranza degli affari dei re.”

A dire il vero, non riesco a vedere la cogenza del richiamo al luogo di Filodemo per intendere, come riferito a Teofrasto, l’aggettivo σχολαστικός in Diogene Laerzio (5.37; 1.21 FHS&G). L’ipotesi del Regenbogen richiede, tra l’altro, un intervento congetturale quale l’integrazione di un αὐτόν (Ménage) o ἐαυτόν (Wehrli) dopo σχολαστικόν. L’ipotesi di Gigante e Sollenberger²⁸ di sottintendere βίος a σχολαστικός ha, invece, il vantaggio sia di mantenere inalterato il testo trådito sia di dargli un senso soddisfacente.

Non credo di avere altro da aggiungere. La speranza è quella di non avere troppo ecceduto nel tentativo di riabilitare, se cosí si può dire, il contributo della sezione biografica su Teofrasto. Quello che mi pare risulti evidente è il sicuro dato di fatto che la nuova edizione delle fonti sulla vita di Teofrasto, seppure non arricchisce le conoscenze sulla biografia del primo successore di Aristotele, contribuisce, comunque, a chiarire alcuni aspetti della vita della scuola peripatetica negli anni iniziali della sua esistenza.

²⁸ Cf. Gigante, *Diogene Laerzio. Vite dei filosofi*, 4th ed. (Roma e Bari 1987) 516s. n. 99 e Sollenberger 1992, 3872–76.

3

Theophrastus' Logic

Mario Mignucci

I.

Reading the surviving fragments of Theophrastus' logical writings one gets the impression that Aristotle's pupil suffered from the sort of problem that the children of a genius often have. The shadow of their parents kills any creative capacity in them, and in the best case they spend their lives repeating or commenting on what their parents have said, done or made, and reinforcing the recollection of these parents among their own contemporaries. They devote their lives to defending their parents' image, in some cases creating a tradition or a cult of these parents, in a desperate effort to be forgiven for the envious feelings they feel for them. The result is often that the children are just as boring and pedantic as their parents were creative and free.

One could quote several passages to corroborate the image of Theophrastus as a reliable and fully authorised transmitter of his master's voice. What the ancients thought of his philosophical activity is well reflected by the following passage from Boethius:

(A) On all matters about which he argues after his master, he <i.e. Theophrastus> touches lightly on those which he knows have been said by

Aristotle earlier, but follows up more diligently other things not dealt with by Aristotle. Here too he did the same thing. Aristotle's treatment of statements in this book was covered by him lightly, but matters on which his master was silent he added with a more exact kind of consideration.¹

This testimony presents the image of someone working at systematizing Aristotelian doctrine by ordering it and filling in gaps. No attempt at an autonomous reworking of problems dealt with by Aristotle seems to be envisaged, all efforts being directed at expanding the theory in order to meet objections.

Admittedly, there are several clues that reinforce such a view. For instance, Philoponus reports that Theophrastus put the syllogistic moods in a different order from that chosen by Aristotle, listing them according to the type and complexity of proof needed for reducing them to the moods of the first figure. This led him to list *Disamis* as the fourth of the third figure syllogisms whereas Aristotle had listed it as the third, and to have his discussion of *Ferison* precede that of *Bocardo*, since the latter is proved by *reductio ad absurdum* and the former by conversion of the minor premiss.²

Not much more interesting are Theophrastus' reported additions to Aristotle's statements about propositions. According to Theophrastus, for instance, "not every *B* is *A*" has a different meaning from "some *B* is not *A*," since the latter expression means that there is (at least) one *B* which is not *A*, whereas the former implies that there are several *B* which are not *A*.³ On the same level of a rather pedantic inquiry is his introduction of the expression 'by transposition' (κατὰ μετάθεσιν) to indicate propositions whose predicates are constituted by indefinite

¹ Boethius *In Int.* 12.9–16 Meiser (= 72A 7–12 FHS&G). Here and in the following I use the translation in FHS&G.

² Cf. Philop. *In Anal.Pr.* 105.28–30; 110.4–7 (= 96A FHS&G). The point is repeated in a scholium to *Anal.Pr.* 1.6, 28a17 edited by Brandis, 155b8–18 (= 96B FHS&G).

³ Cf. Scholium to Philop. *In Anal.Pr.* 145a30–37 Brandis (= 83 FHS&G). I follow a suggestion by Jan van Ophuijsen in rendering πλείοσιν in τὸ πλείοσιν ὑπάρχειν at 145a33 not with 'to many' as FHS&G do, but with 'to several'. J. Brunschwig, "Indéterminé et 'indéfini' dans la logique de Théophraste," *Revue philosophique de la France et de l'Etranger* 172 (1982) 364 n. 14, thinks that we should correct the text into τὸ πλείοσιν μὴ ὑπάρχειν to extract the interpretation we have proposed. However, it may be that the anonymous scholiast was sloppy in his way of referring to Theophrastus' view, or that he played on the ambiguous meaning of ὑπάρχειν, which in Aristotle's usage sometimes covers not only a positive but also a negative attribution (cf. e.g. *Anal.Post.* 1.16, 80a2).

verbs, i.e. of the form: "*a* is non-*F*." Although Aristotle's commentators lay great stress on this terminological addition, it does not seem terribly important.⁴

Just a little less boring is the report that Theophrastus called particular propositions, i.e. *AiB* and *AoB*, "indefinite particular." Two different reasons are attributed to him for introducing this label. According to Alexander, *AoB* was called indefinitely true because it is consistent both with *AeB* and with *AiB*. Therefore, its being true by itself rules out only *AaB* but not *AeB* or *AiB*. In this respect particular propositions are different from universal propositions, since the truth of the latter excludes the truth of their contradictories and also, according to both Aristotle and Theophrastus, of their contraries.⁵ On the other hand, Boethius and the Anonymus on *De interpretatione* claim that Theophrastus' reason for calling particular propositions "indefinite particular" was that in his view the particular quantifier "some" was indeterminate in its nature. When we say, for instance, that "some man is just," the quantifier picks up a part of the extension of man, at least one individual, without specifying which one.⁶ This remark is correct; it can be linked with Ammonius' observation that the indefiniteness of particular propositions distinguishes them from singular statements because the latter, but not the former, refer to and isolate well-determined individuals.⁷ All this is evidence for the claim that Theophrastus had at least continued, if not developed, a reflection on the nature of the quantifiers introduced by his teacher in the logical analysis of propositions.⁸

⁴ Six testimonies are collected in the Fortenbaugh edition about this point. Cf. 87A–F FHS&G.

⁵ Cf. Alex. *In Anal. Pr.* 66.2–10 (= 82A FHS&G).

⁶ Cf. Boethius *In Int.* 140.3–12 Meiser (= 82B FHS&G); Anon. *In Int.* 32.15–33.6 Tarán (= 82C FHS&G).

⁷ Cf. Ammon. *In Int.* 90.12–20 (= 82E FHS&G). By referring to Ammonius' passage Jacques Brunschwig (1982, 367–70) seeks to establish that what we have taken as two different reasons for calling a particular proposition indefinite in fact hints at two different characteristics of particular propositions. Theophrastus is then supposed to have said that a particular proposition is indefinite, ἀδιόριστος, because of its being consistent with the corresponding universal proposition, as explained by Alexander. On the other hand, he is taken to have qualified particular propositions as indeterminate, ὁρίστος, because of the indeterminate nature of the quantifier "some," as is underlined by Boethius and Ammonius. This may be true, but to keep Theophrastus' terminology consistent we should then change the text of the Anonymus by reading ἀόριστον instead of ἀδιόριστον at 32.19.

⁸ Jacques Brunschwig, 1982, has clearly shown the Aristotelian background of these Theophrastean views about quantified propositions.

II.

Theophrastus' theory of propositions does not look very original, and if we move to the theory of syllogism the depressing impression of *déjà vu* is hardly removed. Theophrastus' most important achievement is the addition of new moods to the canonical four of the first figure, namely *Barbara*, *Celarent*, *Darii* and *Ferio*. As Alexander and Boethius report, Theophrastus added five moods to the four recognised by Aristotle in the first figure. Three of them are *Barbara*, *Celarent* and *Darii* with converted conclusions, i.e.

- | | | |
|-----|-----------------------|------------------------|
| (1) | $AaB, BaC \vdash CiA$ | (<i>Baralippton</i>) |
| (2) | $AeB, BaC \vdash CeA$ | (<i>Celantes</i>) |
| (3) | $AaB, BiC \vdash CiA$ | (<i>Dabitis</i>) |

The remaining two are

- | | | |
|-----|-----------------------|-------------------------|
| (4) | $AaB, BeC \vdash CoA$ | (<i>Fapesmo</i>) |
| (5) | $AiB, BeC \vdash CoA$ | (<i>Frisesomorum</i>) |

Theophrastus indicated also the ways in which these moods can be reduced to the canonical schemes of the first figure. In the case of the first three this way is obvious, whereas for (4) and (5) it is necessary to perform a conversion of both premisses.⁹

However, all the commentators rightly underline that this extension of Aristotle's theory is along lines indicated by Aristotle himself. *Fapesmo* and *Frisesomorum* are mentioned in a sort of appendix to the exposition of the categorical syllogistic which is regarded by some scholars as a later addition by Aristotle himself.¹⁰ The other moods are implicitly recognised by Aristotle when he says that more than one conclusion can be derived from the same pair of premisses, and as an example of this possibility he points out that in some cases the original conclusions can

⁹ Alex. In *Anal.Pr.* 69.26–70.21 (= 91A FHS&G); Boethius *De Syll.Cat.* 813Bff. (= 91D FHS&G). A formal reconstruction of Theophrastus' reductions can be found in I. M. Bochenski, *La logique de Théophraste* (Fribourg en Suisse 1947) 56–57.

¹⁰ Cf. *Anal.Pr.* 1.7, 29a21–26. This is the view, among others, of I. M. Bochenski, *Ancient Formal Logic*, 4th ed. (Amsterdam 1968) 54; J. Lukasiewicz, *Aristotle's Syllogistic from the Standpoint of Modern Formal Logic*, 2nd ed. (Oxford 1957) 27.

be converted.¹¹ It is hard to escape the impression that Theophrastus has simply collected the scattered observations of his master and given them a more systematic presentation.

In any case Theophrastus has not been as systematic as he could have been, because what Aristotle said in *Anal.Pr.* 2.1 included the possibility of the so-called 'subaltern' moods, as for instance:

(6) $AaB, BaC \vdash AiC$ (Barbari)

that is, syllogisms which differ from the standard ones in having not a universal, but the corresponding particular, conclusion.¹² Once more we get the impression that Theophrastus limited himself to developing and imposing order on Aristotle's own suggestions without much originality and in a rather slavish way.

III.

Can this conclusion be extended to the whole of Theophrastus' logic? If one were tempted to answer this question in the affirmative on the basis of our analysis so far, it would be easy to object that our presentation of Theophrastus' logic has been defective and tendentious, since it does not allow us to evaluate the two really original and creative aspects of his theory.

This objection can be sustained. As is well known, Theophrastus developed quite extensively the theory of the so-called "wholly hypothetical syllogisms," and, moreover, he had original views about modal logic which led him to deviate consistently from Aristotle's positions. Jonathan Barnes has recently provided a discussion of Theophrastus' hypothetical syllogistic, and thrown light on its character as in some ways anticipating the Stoic theory of inference.¹³ I have almost nothing

¹¹ Cf. *Anal.Pr.* 2.1, 53a8–14.

¹² As is well known, Ariston of Alexandria is reported to have introduced the five subaltern moods: cf. Apuleius, *De Int.* 213.5–10 Moreschini, and also M. W. Sullivan, *Apuleian Logic* (Amsterdam 1967) 165–66; G. Patzig, *Aristotle's Theory of the Syllogism, A Logico-philological Study of Book A of the Prior Analytics*, tr. J. Barnes (Dordrecht 1968) 130 n. 29.

¹³ J. Barnes, "Theophrastus and Hypothetical Syllogistic," in *Theophrastus of Eresus. On his Life and Work. RUSCH 2* (New Brunswick 1985) 125–41; also in *Aristoteles: Werk und Wirkung. Paul Moraux gewidmet*, ed. J. Wiesner, vol. I: *Aristoteles und seine Schule* (Berlin and New York 1985) 557–76.

to add to his interpretation, and therefore turn to modal logic. In exploring Theophrastus' contribution I hope to make a case for his originality in this part of logic as well.

Theophrastus made several substantial corrections to the Aristotelian doctrine. Needless to say, these corrections can be explained by Theophrastus' natural desire to free the theory of his teacher from contradictions and mistakes. But, at the same time, they offer a clue towards finding in Theophrastus a notion of the proposition which is different from Aristotle's explicit views on this subject. If this conclusion is justified, then Theophrastus' figure as a logician emerges from the twilight of diligent commentatorship into the full light belonging to a protagonist.

IV.

Let us start by considering a point which does not concern modal, but categorical, syllogistic, namely Theophrastus' proof for the conversion of universal negative propositions. As is well known, Aristotle has a very complicated proof for this, based on what is called 'exposition' (ἐκθεσις).¹⁴ We need not go into a detailed analysis of his argument, which is difficult and not uniformly interpreted by scholars.¹⁵

¹⁴ Cf. *Anal.Pr.* 1.2, 25a14–17.

¹⁵ H. Maier (*Die Syllogistik des Aristoteles*, 3 vols., 3rd ed. [Hildesheim and New York 1969–70] II.2:144–49) and W. D. Ross (*Aristotle's Prior and Posterior Analytics* [Oxford 1949] 32), for instance, condemned Aristotle's use of ἐκθεσις as an illegitimate procedure because a reference to perception was allegedly made in it, which is worthless in logic. Jan Lukasiewicz (1957, 59–67) and Günther Patzig (*Aristotle's Theory of the Syllogism*, tr. J. Barnes [Dordrecht 1968] 166–80; German edition *Die Aristotelische Syllogistik*, 3rd ed. [Göttingen 1969] [Abh. Ak. Wiss. zu Gött., Phil.-Hist. Kl. III.42]) were able to find a logical interpretation of Aristotle's method of proof. Although many authors follow their view (e.g. K. Berka, "Der 'Beweis durch Heraushebung' bei Galenos," *Phronesis* 3 (1958) 150–51; L. E. Rose, *Aristotle's Syllogistic* [Springfield 1968] 36; R. Blanché, *La logique et son histoire d'Aristote à Russell* [Paris 1970] 54 n. 1; N. Rescher, *Studies in Modality* [Oxford 1974] 3–4; 10–12; W. Wieland, "Die Aristotelische Theorie der Notwendigkeitsschlüsse," *Phronesis* 9 (1966) 36–37; G. G. Granger, *La théorie aristotélicienne de la science* [Paris 1976] 132), other scholars have pursued a different path (e.g. E. W. Beth, *The Foundations of Mathematics* [Amsterdam 1959] 191–92; Id., *Aspects of Modern Logic* [Dordrecht 1971] 44–45; J. Hintikka, *Logic, Language-Games and Information* [Oxford 1973] 237–40; J. Lear, *Aristotle and Logical Theory* [Cambridge 1980] 4; R. Smith, "What is Aristotelian Ecthesis?," *History and Philosophy of Logic* 3 (1982) 113–27; P. Thom, *The Syllogism* [München 1981] 164–74). For a discussion of this question see M. Mignucci, "Expository Proof in Aristotle's Syllogistic," in *Aristotle and the Later Tra-*

The point relevant to our discussion is that Theophrastus did not adopt Aristotle's argument. It may be that he just found a simpler proof, or that he for some reason was reluctant to use exposition. The latter hypothesis seems to be supported by the observation that two modal syllogisms, *Baroco LLL* and *Bocardo LLL*,¹⁶ which Aristotle proves by means of exposition,¹⁷ are demonstrated by Theophrastus through a *reductio ad impossibile*.¹⁸ As is clear, Aristotle was debarred from using a *reductio* for these moods by the fact that he had a different notion of possibility. According to him a possible proposition—we will call this a 'strictly possible proposition'—e.g. $\Diamond P$, is a proposition that is neither necessary nor impossible.¹⁹ To prove, for instance, *Bocardo LLL* we need *Barbara MLM*, which is a mood that Aristotle never considered, because what in his system is nearest to this syllogism is *Barbara QLQ*, from which *Bocardo LLL* does not follow by *reductio*.²⁰ The fact that Theophrastus proved *Baroco LLL* and *Bocardo LLL* by *reductio* is proof that he did not use Aristotelian possibility, but 'normal' possibility, that which may be defined in terms of necessity in the customary way—which we may call 'wide possibility' and symbolize by the usual diamond, ' $\Diamond$ '.²¹

However, an expository proof of the conversion rule for (widely) possible propositions is attributed to Theophrastus by an anonymous commentator on *De interpretatione* and the *Analytics*, and, as we shall see, this proof is surely Theophrastus' proof.²² But the demonstration is not expository in the usual, Aristotelian, sense; we may suspect that the label "expository" is given to Theophrastus' argument by the commentator, a suspicion that seems to be confirmed by the absence of this label

dition (*Oxford Studies in Ancient Philosophy*, Suppl. Vol.), edd. H. Blumenthal and H. Robinson (Oxford 1991) 9–28.

¹⁶ As usual, '*L*' stands for a necessary, '*M*' for a possible, and '*X*' for a non-modalised proposition. Therefore, '*Bocardo LLL*' means "a syllogism in *Bocardo* with necessary premisses and conclusion."

¹⁷ *Anal.Pr.* 1.8, 30a3–14.

¹⁸ Alex. In *Anal.Pr.* 123.18–24 (= 104 FHS&G).

¹⁹ Cf. e.g. *Anal.Pr.* 1.13, 32a18ff. It is clear from this text that for strict possibility the following equivalence holds:

(*) $\Diamond P \leftrightarrow \neg \Box \neg P \wedge \neg \Box P$

²⁰ *Barbara QLQ* (where '*Q*' denotes a strictly possible proposition) is considered by Aristotle in *Anal.Pr.* 1.16, 36a2–7.

²¹ For wide possibility the following equivalence can be stated:

(**) $\Diamond P \leftrightarrow \neg \Box \neg P$

²² Cf. Anon. In *Int. et Anal.* 100.6ff. (= 102C 7–9 FHS&G).

from the parallel passages in Alexander.²³ If we could ascribe to Theophrastus a rejection of ecthetic proofs for syllogisms, this would already give us quite an interesting result, because one difficult aspect of Aristotle's modal syllogisms notoriously depends on his allowing expository proofs to validate some of them.²⁴

As is well known, according to Aristotle and Theophrastus universal negative categorical propositions convert by simple transposition of the subject and the predicate, or *simpliciter*, as Medieval logicians had it. Thus we have

(EC) $AeB \vdash BeA$

Here is Theophrastus' argument for (EC):

(B) Theophrastus and Eudemos gave a simpler proof that the universal negative is convertible, called the universal negative "universal privative."²⁵ They give the proof thus: let it be assumed that *A* is predicated of no *B*; if of none, *A* has been disjoined from *B* and separated from it; but what has been disjoined has been disjoined from that which has been disjoined from it; *B* too, then, has been disjoined from every *A*; but if so, it is of none of it. This then is their proof.²⁶

That the proof is to be ascribed to Theophrastus is not in doubt. Not only is the argument repeated, with some confusion, by Philoponus,²⁷ but the idea of separation, which plays an important role in the proof, can be found in several other arguments ascribed to Theophrastus, as we shall see in a moment. The guiding idea is easy to grasp. If *A* is true of no *B*, then it is separated from *B*. But separation is a symmetrical relation: if *A* is separated from *B*, then *B* is also separated from *A*. Therefore *B*, being separated from *A*, is true of no *A*, period.

²³ Cf. Alex. *In Anal.Pr.* 220.9ff. (= 102A FHS&G); *In Anal.Pr.* 223.3–15 (= 102B FHS&G).

²⁴ Cf. on this point J. van Rijen, *Aspects of Aristotle's Logic of Modalities* (Dordrecht, Boston and London 1989) 194ff. There are, however, attempts at reconstructing Aristotle's modal syllogistic which allow expository proofs and avoid major inconsistencies. See e.g. P. Thom, "The Two Barbaras," *History and Philosophy of Logic* 12 (1991) 135–49; F. Johnson, "Modal Ecthesis," *History and Philosophy of Logic* 14 (1993) 171–82.

²⁵ I read *ὀνόμασσαν* at 31.5 with the Aldina.

²⁶ Alex. *In Anal.Pr.* 31.4–10 (= 90A FHS&G). FHS&G's translation slightly modified.

²⁷ Philop. *In Anal.Pr.* 48.11–18 (= 90B FHS&G).

Although simple, clear and easy, this argument has been regarded with suspicion by modern interpreters. I am thinking not only of Prantl, who sees in Theophrastus' proof the sign of a formalistic attitude²⁸ (to be blamed, of course), but also of more judicious and formally trained scholars such as Bochenski. The latter has written a reference work on Theophrastus' logic and is disposed to highlight his author's every original move. In this spirit he explicitly declares Theophrastus' argument to be a real proof ("*une véritable preuve*"), to be considered as "simpler and more natural than the corresponding Aristotelian one."²⁹ However, he claims that Theophrastus' reasoning is based on a "spatial scheme (*un schéma spatial*) with the help of which the extensions of the terms are explained."³⁰ A few lines later this idea is repeated and the spatial scheme is qualified as "extensional" (*extensionnel*).³¹

Bochenski's point is not clear to me. (EC), the thesis to be proved, is a thesis of logic. Therefore, a proof of it must be a logical proof, and I do not see how a logical proof can be based on a spatial scheme, and how a spatial scheme could express term extensions in a way which is acceptable from a logical point of view. If we believe that Theophrastus' argument is "*une véritable preuve*"—and the fact that it is offered as a substitute for Aristotle's sophisticated logical demonstration suggests that it was indeed intended as a genuine proof—we must provide a logical interpretation of his alleged spatial scheme, at least in the sense that it can compete for the role of substituting for the Aristotelian proof. In other words, we must suppose that Theophrastus' terminology of "separation" does not entail a direct reference to a position of two objects in space, but refers to a relation which can be understood and interpreted in a logically admissible way.³² What, then, does "separation" here mean?

²⁸ C. Prantl, *Geschichte der Logik im Abendlande*, 3 vols., 2nd ed. (Leipzig 1927) I.362.

²⁹ Cf. Bochenski 1947, 54 and 55–56.

³⁰ Cf. Bochenski, *ibid.* 55.

³¹ Cf. Bochenski, *ibid.* 56.

³² In expressing myself in these terms I do not think that I am attributing to Theophrastus a notion of logically admissible proof which is foreign to him. The point is that Aristotle had proposed a highly sophisticated *logical* proof of (EC). In order to be considered as a replacement for it, Theophrastus' argument had to meet the same logical standard. Just as among mathematicians of Aristotle's times no simple measurement of special cases, however successfully repeated, would have been taken as a proof of a general geometrical statement, I do not believe that an argument would have been seriously considered among Aristotle's pupils if it could not have been articulated in more adequate terms than spatial ones. Although we need a very developed

To answer this question, it must be pointed out that our relation is expressed in Greek by the verb ἀποξεύγνυμι, which may be translated by means of the verb ‘to disjoin’. Of course, when one says that if A is true of no B , then A is disjoined from B , this rings a bell in the head of a modern logician, who immediately thinks of set theory. Needless to say, we cannot interpret Theophrastus’ disjunction in terms of a set-theoretical disjunction and claim that it means something like

$$(7) \quad A \cap B = \emptyset$$

Although (7) represents the modern set-theoretical counterpart of the intuitive notion of logical separation, we are not entitled to attribute such a view to Theophrastus.³³

There is a more natural way to interpret the notion of disjunction from a logical point of view which we may think that Theophrastus had in mind, since it is not based on any such artificial and technical notions as those of set and empty set. The point is simple. Suppose that any two general terms B and A determine two extensions formed by the individuals of which they are true, the b ’s and the a ’s respectively. We say that A and B are disjoint when no a and no b are the same. Formally we may state the following equivalence:

$$(TE^*) \quad Dis(A, B) \leftrightarrow \forall a \forall b (a \neq b)$$

where, of course, ‘ $Dis(x, y)$ ’ stands for “ x is disjoint from y .” Since $Dis(A, B)$ is equivalent to AeB , we may also state

theory to establish in general what a logical proof is and what we may legitimately accept as a logical proof, it is often pretty clear and simple to reject any particular proof as non-logical, and I am convinced that the pupils of Aristotle would have thus responded to an argument based exclusively on a “schéma spatial.”

³³ By speaking of Theophrastus’ “schéma spatial” Bochenski (1947, 55–56) alludes to the extension of terms and he refers to Euler’s diagrams. Is it in this way that he thinks that Theophrastus had after all elaborated a logical proof for (EC)? If Theophrastus’ “separation” is to be interpreted as extensional exclusion, I agree that his proof is a logical one but I no longer see what Bochenski’s “schéma spatial” refers to. On the other hand, if Theophrastus is supposed to have used in his argument a “schéma spatial,” then I do not see how we can think of his proof as a logical one. In any case I do not believe that his argument can be interpreted with reference to extensions of terms. Such a perspective is too modern; nothing resembling the notion of a set was conceived of by Aristotle or other Peripatetics.

$$(TE) \quad AeB \leftrightarrow \forall a \forall b (a \neq b)$$

We take (TE) as the Theophrastean interpretation of a universal negative proposition, once the notion of separation has been spelled out in terms of logical disjunction. Therefore, we can say that Theophrastus' proof is in the end a logical proof based on the symmetry of the relation of *being not the same as*.

V.

What follows is intended to show that this way of interpreting propositions in terms of identity is by no means an *ad hoc* device invented by Theophrastus to justify in a simple way the conversion rule for universal negative propositions. My feeling is rather that this conception of the proposition was a pivotal idea underlying many of his views about modal logic, and in particular those views in which he departed from Aristotle.

To substantiate my claim I will consider the famous case of the two *Barbaras*. As is well known, in his modal logic Aristotle accepted *Barbara LXL*, but rejected *Barbara XLL*. In other words, in his view a pair of premisses in *Barbara* of which the major is necessary and the minor categorical yields a necessary conclusion. On the other hand, if the major premiss is categorical and the minor necessary, the conclusion is not necessary but categorical.³⁴ Expressed in formal terms, Aristotle admitted

$$(B_{LXL}) \quad \Box AaB, BaC \vdash \Box AaC$$

and

$$(B_{XLX}) \quad AaB, \Box BaC \vdash AaC$$

whereas he rejected

$$(B_{XLL}) \quad AaB, \Box BaC \vdash \Box AaC$$

As many ancient sources tell us, Theophrastus held a different view. He rejected not only (B_{XLL}) with Aristotle, but also (B_{LXL}) , and replaced it with

³⁴ *Anal.Pr.* 1.9, 30a15ff.

$(B_{LXX}) \quad \square AaB, BaC \vdash AaC$

By contrast (B_{XLX}) was accepted by both.³⁵ On the basis of this, Theophrastus has been hailed as the inventor of the so-called “*peiores* rule,” according to which the conclusion of a valid syllogism cannot be stronger in modality than the weaker of its two premisses.³⁶

To evaluate the difference between Aristotle and Theophrastus, we must first try to diagnose the possible reasons that may have led the former to hold the now quite unusual view that *Barbara LXL* is valid. After that we will consider Theophrastus’ argument against *Barbara LXL*, and we will deduce from this a general interpretation of Theophrastus’ notion of a proposition.

VI.

Let us begin with Aristotle. As is well known, there are several different interpretations of his views. The standard one is probably that due to Albrecht Becker.³⁷ In his 1933 dissertation Becker pointed out that *Barbara LXL* can only be validated on the basis of a *de re* reading of its modal operators. If we interpret its major premiss as saying what in modern terminology we might express as

(A1) $\forall x(B(x) \rightarrow \square A(x))$

and we add to it as the minor premiss

(A2) $\forall x(C(x) \rightarrow B(x))$

we immediately get as a conclusion

³⁵ Cf. e.g. Alex. *In Anal.Pr.* 124.8–30 (= 106A FHS&G); 132.23–34 (= 106B FHS&G); Philop. *In Anal.Pr.* 124.9–125.18 (= 106D 11–58 FHS&G); Ps.-Amm. *In Anal.Pr.* 38.38–39.10 (= 106E FHS&G); Averroes *Middle Comm. in Anal.Pr.* 179.8ff. Jéhamy (= 106H FHS&G).

³⁶ Cf. e.g. Averroes *Quaestiones* 5, 127.7–18 ‘Alawī (= 105 FHS&G); Alex. *In Anal.Pr.* 124.8–30 (= 106A FHS&G); Philop. *In Anal.Pr.* 123.12–20 (= 106D 1–10 FHS&G); Ps.-Ammon. *In Anal.Pr.* 38.38ff. (= 106E FHS&G). It should be clear that the *peiores* rule is not a deduction rule.

³⁷ Cf. A. Becker, *Die aristotelische Theorie der Möglichkeitsschlüsse. Eine logisch-philologische Untersuchung der Kapitel 13–22 von Aristoteles Analytica Priora* (Berlin 1933) 37–43.

$$(A3) \quad \forall x(C(x) \rightarrow \Box A(x))$$

by what is a perfectly valid inference based on the transitivity of the relation of implication. On the other hand, if we read the premisses of *Barbara LXL* as strongly or weakly *de dicto*, we are forced to reject *Barbara LXL* and side with Theophrastus.

A strongly *de dicto* quantified proposition is a proposition in which the modal operator is put in front of the whole proposition. For instance

$$(A4) \quad \Box \forall x(B(x) \rightarrow A(x))$$

is strongly *de dicto*. On the other hand,

$$(A5) \quad \forall x \Box(B(x) \rightarrow A(x))$$

is weakly *de dicto*, since the modal operator is put immediately after the quantifier. In both these readings of the major premiss of *Barbara LXL* we cannot find a way to validate this mood. To simplify the discussion let us oppose to *de re* propositions only *de dicto* propositions in a strong sense, which we will call simply '*de dicto*'.

Becker was well aware that if the *de re* reading of the modal operators might justify the admission of *Barbara LXL*, this way of interpreting the modal operators jeopardizes the possibility of accepting the conversion rules for modal propositions.³⁸ Take for instance $\Box AeB$. According to Aristotle this converts into $\Box BeA$.³⁹ But how can this rule be proved if the interpretation of $\Box AeB$, on the basis of (A1), is

$$(E1) \quad \forall x(B(x) \rightarrow \Box \neg A(x)) \quad ?$$

If we interpret $\Box AeB$ *de dicto*, i.e. as

$$(E2) \quad \Box \forall x(B(x) \rightarrow \neg A(x))$$

the conversion rule can easily be explained on the basis of the necessitation rule

³⁸ Cf. Becker 1933, 41–42.

³⁹ Cf. *Anal.Pr.* 1.3, 25a29–31.

$$\begin{array}{c}
 \text{(RL)} \quad \quad A \vdash B \\
 \hline
 \Box A \vdash \Box B
 \end{array}$$

some form of which was probably recognised by Aristotle.⁴⁰ So we are in a difficult position: to explain the conversion rules for modal propositions, we need a *de dicto* reading of the modal operators; but at the same time, to justify some of the inferences of the modal syllogistic, we are forced to adopt a *de re* reading.

VII.

I consider Becker's interpretation to be correct, although it leads us to conclude that Aristotle's theory of modal syllogisms is basically inconsistent, and that it vacillates between two incompatible intuitions about modal propositions. However, I must add that in recent years serious efforts have been made to arrive at interpretations of Aristotle's modal syllogistic which restore its consistency.

Some of these are on the lines of the *de re/de dicto* distinction, and try to present a new and more elaborate pattern of distribution of the modal operators in the propositions. Others follow a different path by linking Aristotle's notion of necessity to his essentialism and his treatment of apodeictic or $\kappa\alpha\theta' \alpha\upsilon\tau\omicron$ predications. Both of these approaches are interesting, and both, in my view, fail to give an adequate account of Aristotle's modal logic. I cannot here examine all the attempts that have been proposed, and in a somewhat arbitrary way will consider just a few of them.

The first of these is due to Ulrich Nortmann.⁴¹ By basing himself on *Anal.Pr.* 1.15, 34b7ff., where Aristotle claims that categorical propositions cannot be taken with a temporal limitation, he interprets Aristotelian *de inesse* propositions as entailing a modal qualification. In particular, AaB is supposed to have the form:

⁴⁰ Cf. e.g. *Anal.Pr.* 1.15, 34a5–15. Lukasiewicz's interpretation of this passage (1957, 138–48) is notoriously mistaken. Of course, I do not claim that Aristotle himself used (RL) to justify the conversion rules.

⁴¹ U. Nortmann, "Ueber die Stärke der aristotelischen Modallogik," *Erkenntnis* 32 (1990) 61–82.

$$(A6) \quad \forall x \Box (B(x) \rightarrow A(x))$$

In a similar vein, $\Box AaB$ takes the following form:

$$(A7) \quad \forall x \Box (B(x) \rightarrow \Box A(x))$$

whereas a contingent proposition is supposed to be interpreted as

$$(A8) \quad \forall x \Box (B(x) \rightarrow \Diamond A(x))$$

Nortmann thinks that his claims about syllogisms involving necessary premisses can all be justified by taking Aristotle's modal propositions in this way.

In my view this interpretation has at least two disadvantages. First of all, an asymmetry between universal and particular categorical propositions must be introduced if the usual non-modal oppositions are to be preserved. For instance, the contradictory of AaB , i.e. AoB , must have the form:

$$(O1) \quad \exists x \Diamond (B(x) \wedge \neg A(x))$$

which is strange.⁴²

What is worse is that with this way of putting things we are compelled to accept not only *Barbara LXL*, which is admitted by Aristotle, but also *Barbara XLL*, which is rejected by him. The point is that, according to Nortmann, S5 constitutes the frame within which the reconstruction of Aristotle's system must be placed.⁴³ Within this frame the following two theorems are supposed to be valid, namely

$$(TR1) \quad \Box (P \rightarrow Q) \rightarrow (\Box P \rightarrow \Box Q)^{44}$$

and

⁴² In a more recent paper ("Does Aristotle's Modal Logic rest on Metaphysical Assumptions?," in G. Meggle and U. Wessels (eds.), *Analyomen I. Proceedings of the 1st Conference "Perspectives in Analytical Philosophy"* (Berlin and New York 1994) 115–25), Nortmann acknowledges the difficulties in his interpretation of categorical propositions as propositions to which the operator of necessity is prefixed. Still, this move is necessary to validate *Barbara LXL*.

⁴³ Cf. Nortmann 1990, 77–78.

⁴⁴ Actually, (TR1) works in a much weaker system than S5, being an axiom of T.

$$(TR2) \quad \Box(P \rightarrow \Box Q) \leftrightarrow (\Diamond P \rightarrow \Box Q)^{45}$$

By using these two laws *Barbara XLL* can easily be proved, if its premisses are interpreted *à la* Nortmann.⁴⁶ This shows that Nortmann's idea can hardly be reconciled with Aristotle's intuitions about the modal operators.

On the side of essentialistic interpretations one of the most articulated attempts has been offered by Jeroen van Rijen in his reconstruction of Aristotle's modal views. Although in his view Aristotle's syllogistic is incoherent, he is able to validate *Barbara LXL* and disprove *Barbara XLL*.⁴⁷ His idea is that in order to find a justification of Aristotle's views we must look at his theory of science, where syllogisms with necessary premisses play an important role. According to Van Rijen, demonstrative premisses must satisfy the following two basic constraints: (i) the domain of discourse of a demonstration must be homogeneous; (ii) the subject terms of all premisses of a demonstrative deduction must be homogeneous with the name of the category or kind of elements of the homogeneous domain of discourse.⁴⁸ By coupling these points with the claim that a universal proposition is necessary only if its terms are homogeneous, i.e. belong to the same genus,⁴⁹ Van Rijen is able to validate *Barbara LXL* and disprove *Barbara XLL*. Apart from the fact that in *Anal.Post.* 1.6 Aristotle seems to reject *Barbara LXL*,⁵⁰ it is difficult to believe that the syllogisms treated in the *Prior Analytics* must obey the same constraints that demonstrations allegedly are under. *Barbara LXL* is not a demonstration, and therefore there is no reason to suppose that the subjects of its premisses should be homogeneous. Moreover, I am doubtful about the adequacy of Van Rijen's characterization of necessity. Propositions such as "some white things are necessarily animals"

⁴⁵ (TR2) is an immediate consequence of **T31**: $\Diamond(P \wedge \Diamond Q) \leftrightarrow (\Diamond P \wedge \Diamond Q)$ (see Appendix 1), and **T31** is a theorem of S5 (cf. G. E. Hughes and M. J. Cresswell, *An Introduction to Modal Logic* [London 1968] 51–52).

⁴⁶ See Appendix 2.

⁴⁷ Cf. Van Rijen 1989, 205–9.

⁴⁸ *Ibid.*, 208.

⁴⁹ For a precise definition of homogeneity see Van Rijen 1989, 178–79.

⁵⁰ *Anal.Post.* 1.6, 75a1–17. This observation is originally due to N. Rescher, "Aristotle's Theory of Modal Syllogisms and Its Interpretation," in M. Bunge (ed.), *The Critical Approach to Science and Philosophy* (Glencoe and London 1964) 170–71.

are not necessary according to Van Rijen, whereas Aristotle does take them as necessary.⁵¹

A different interpretation has been presented by Richard Patterson.⁵² On his view Aristotle is supposed to employ in his modal syllogistic two different notions of necessity. Take for instance the proposition

(8) *A necessarily belongs to every B*

In one reading, the strong one, (8) means that

(i) *A is part of the essence of all things designated by 'B'*
and

(ii) *A is part of what-it-is-to-be B,*

where "being part of what-it-is-to-be *X*" is explained by Patterson in a later article as "being included in the definition of *X*."⁵³ On the other hand, in the weak reading, (8) need only satisfy condition (i) to be true. An example of a necessary proposition in the strong reading is

(9) *animal necessarily belongs to every human*

since 'animal' applies essentially to human things and it is part of the essence of being a human. A weak necessary proposition is for instance

(10) *animal necessarily belongs to every white thing*

in all possible situations in which only animals are white.⁵⁴ Patterson

⁵¹ Cf. e.g. *Anal.Pr.* 1.9, 30b5–6. It is true, however, that Aristotle is somewhat confused about the examples of necessary propositions that he gives. We will return to this problem later.

⁵² Cf. R. Patterson, "The Case of the Two Barbaras: Basic Approaches to Aristotle's Modal Logic," *Oxford Studies in Ancient Philosophy* 7 (1989) 1–40.

⁵³ Cf. R. Patterson, "Conversion Principles and the Basis of Aristotle's Modal Logic," *History and Philosophy of Logic* 11 (1990) 151–72, at 167. In his more recent book (*Aristotle's Modal Logic. Essence and Entailment in the Organon* [Cambridge 1995] 42–44 and 235) Patterson qualifies this relation as "being entailed the essence of" in order to include propria among the predicates which belong necessarily in a strong sense to their subjects.

⁵⁴ Cf. Patterson 1989, 3–4.

claims that by using this distinction Aristotle's view about the two *Barbaras* can easily be explained, and that *Barbara LXL* is valid if the necessity of the conclusion is read in the weak sense, and invalid if it is taken in the strong sense.⁵⁵

First of all, let us clarify the distinction. Patterson reformulates the definition of weak necessity by stating that $A \text{ N}^w \text{ all } B$ (A belongs in a weakly necessary way to every B) is true if

- (a) A is part of what-is-to-be a C
- (b) All B s are essentially C s

for some definable essence C . On the other hand, $A \text{ N}^s \text{ all } B$ (A belongs in a strongly necessary way to every B) is true if

- (c) A is part of what-is-to-be a B
- (d) All B s are essentially B ⁵⁶

First of all, it should be clear that under these definitions strong necessity implies weak necessity and not *vice versa*.⁵⁷ Moreover, (10) is not *by itself* a case of a weakly necessary proposition, since it does not satisfy condition (b). It becomes a special case of weak necessity only where (b) is fulfilled, i.e. in all those situations in which only white things are animals.

One of the things I find worrying in this interpretation is that I do not see very well how Patterson would treat one of the counterexamples to *Barbara LXL* that Theophrastus is reported to have offered against Aristotle. Theophrastus' example is as follows. From the propositions:

- (11) moving on legs necessarily belongs to every walking thing
- and

- (12) walking belongs in fact to every man

one should be entitled to conclude that

⁵⁵ *Ibid.*, 15–16.

⁵⁶ *Ibid.*, 19–20.

⁵⁷ Cf. Patterson 1990, 166 n. 31.

- (13) moving on legs necessarily belongs to every man

if the Aristotelian *Barbara LXL* were accepted. But (13) is obviously false. Therefore, *Barbara LXL* and Aristotle's claim must be rejected.⁵⁸ One might expect that Patterson would have denied that Theophrastus' syllogism is a counterexample to Aristotle's *Barbara LXL* because the conclusion of the former, i.e. (13), is false if taken as strongly necessary, but true if it is taken as weakly necessary. This cannot be because (13) is neither strongly nor weakly necessary. It is not strongly necessary because it fails to satisfy condition (c), and it is not weakly necessary because it fails to fulfil condition (b). In fact, Patterson's move consists in telling us that (11) is true only on a *de dicto* reading of its modal operator and he concludes that Theophrastus' counterexample works only against a *de dicto* interpretation of *Barbara LXL*.⁵⁹ Thus, Patterson's idea seems to be that (11) is not a proposition of the kind considered by Aristotle, i.e. falling under the distinction between strong and weak necessity. However, Aristotle in his syllogistic refers to necessary propositions which do not fall under the dichotomy between strong and weak necessity. By considering a candidate antecedent in *Cesare* Aristotle claims that the following triple of formulas may be true together, namely:

$$\Diamond AeB \quad \Box AaC \quad BaC$$

and he proves his assertion by considering the following triple of propositions which are instances of those formulas, i.e.

- (14) movement possibly belongs to no animal
 (15) movement necessarily belongs to everything awake
 (16) animal belongs to everything awake⁶⁰

It is easy to see that proposition (15) is neither strongly nor weakly necessary because it fails to satisfy (d) and (b), the situation here being exactly the same as with (11). Therefore, Theophrastus seems to be en-

⁵⁸ Cf. Alex. *In Anal.Pr.* 124.24–30 (= 106A 18–25 FHS&G). Philoponus has a very similar example (*In Anal.Pr.* 124.24–27 = 106 D 28–35 FHS&G).

⁵⁹ Cf. Patterson 1995, 78–79.

⁶⁰ *Anal.Pr.* 1.19, 38a38–b2.

titled to advance his syllogism as a counterexample to the Aristotelian *Barbara LXL*, since he picks up propositions of the same sort as those used by Aristotle.

One might try to answer this objection by pointing out that Aristotle is sometimes careless with his examples. It is well known that he claims that the proposition:

- (17) animal belongs to no white thing

can be taken as possible,⁶¹ whereas in another passage he says that

- (18) animal belongs to some white thing

is a necessary proposition,⁶² and these two statements are obviously inconsistent.⁶³ But the point is that there is no reason for attributing to Aristotle the distinction between strong and weak necessity. Patterson agrees that Aristotle has not theorized it, but he thinks that Aristotle includes examples of both kinds of necessity in his treatment of syllogistic propositions. Of course this fact does not prove anything; the problem remains that the necessity which splits in weak and strong does not cover all the cases in which we and Aristotle speak of necessary propositions.

Moreover, and more importantly, the consequences of Patterson's distinctions do not fit in very well with Aristotle's developments of his theory. Patterson claims that by using his distinction he is able to justify both such syllogisms as *Barbara LXL*, and the rules of conversion of modal propositions. This is a *crux* for any interpretation *à la* Becker, since *Barbara LXL* can only be justified by interpreting its modal propositions as *de re*, whereas modal conversions require a *de dicto* interpretation of the modal operators. Patterson's claim is that there is a way to justify the modal conversions for necessary propositions if they are interpreted in terms of strong necessity. In particular, on his view AN^seB (*A* belongs in a strongly necessary way to no *B*) converts into BN^seA (*B* belongs in a strongly necessary way to no *A*). On the other hand the corresponding implication for weakly necessary propositions does

⁶¹ *Anal.Pr.* 1.10, 30b35–36.

⁶² *Anal.Pr.* 1.9, 30b5–6.

⁶³ Gisela Striker has dealt with this problem in an unpublished paper (*Assertoric vs. Modal Syllogistic*, 1991).

not hold, and therefore we cannot infer $B \text{N}^w e A$ from $A \text{N}^w e B$.⁶⁴ Consider now Aristotle's proof of *Camestres XLL*, which is set out as follows:

(C) The same happens if the negative premiss is put in relation to C . For if A cannot belong to any C , then neither can C belong to any A ; but A belongs to every B ; consequently, C cannot belong to any B , for then it would again become the first figure. Therefore, neither can B belong to any C , for this proposition converts similarly.⁶⁵

Aristotle's proof of *Camestres XLL*, i.e.

(CS_{XLL}) $AaB, \Box AeC \vdash \Box BeC$

is in three steps. First step: we convert the premiss $\Box AeC$ into $\Box CeA$. Second step: by adding AaB to the converted premiss $\Box CeA$ we get *Celarent LXL*, i.e.

(CL_{LXL}) $\Box CeA, AaB \vdash \Box CeB$

which has already been admitted as valid.⁶⁶ Third step: the conclusion of (CL_{LXL}), $\Box CeB$, being a universal negative proposition, is converted into $\Box BeC$, thus yielding the conclusion of *Camestres XLL*.

It is easy to show that this proof does not square with Patterson's interpretation of the Aristotelian necessity. Step one may be justified if we suppose that the proposition $\Box AeC$ is necessary in a strong sense. In step two *Celarent LXL* is implied, and according to Patterson this syllogism can only be valid if its conclusion is taken to be weakly necessary. But if so, the conversion of its conclusion cannot be allowed, and there is no way to pass from $\Box CeB$ to $\Box BeC$. Aristotle's proof cannot be reconstructed within Patterson's framework.⁶⁷ I think that it is better to abandon Patterson's distinction between strong and weak necessity.⁶⁸

⁶⁴ Cf. Patterson 1990, 168–69.

⁶⁵ *Anal. Pr.* 1.10, 30b14–18.

⁶⁶ *Anal. Pr.* 1.9, 30a32–33.

⁶⁷ There are many discrepancies between Aristotle's system of necessary syllogisms and Patterson's reconstruction. According to him, while *Barbara* and *Celarent LXL* are both valid on a weak reading of the necessary propositions (1995, 81–82) *Cesare LXL* and *Camestres XLL* are invalid for whatever reading of the modal premisses (82–85). On the other hand, *Disamis* and *Bocardo LXL*, which are rejected by Aristotle (*Anal. Pr.* 1.11, 31b31–33; 31b37–32a5), turn out to be valid on a weak reading (86).

⁶⁸ I do not insist on another aspect of Patterson's interpretation on which he lays great stress, namely the idea that the *de re/de dicto* distinction is unable to capture

Before returning to Theophrastus I would like to mention another attempt at interpreting Aristotle's mixed syllogisms with categorical and necessary premisses which has recently been presented by Fred Johnson.⁶⁹ His proposal is particularly interesting because it shows that a consistent interpretation of this section of Aristotle's modal logic can be offered. What is more difficult to believe is that Johnson's reconstruction can be taken as an interpretation of Aristotle's view.⁷⁰ I will limit myself to considering just one example. Johnson presents a semantics for the modal propositions which is based on a primitive copulative relation, expressed by ' $\in$ ', according to which we can say e.g. that $a \in A$ (where ' a ' is the name for an individual and ' A ' the name for a predicate), a is one of the A , and also that $a \in_n A$, i.e. a is necessarily one of the A . With respect to this primitive relation the semantic for the four types of Aristotelian propositions is given by introducing a function n of evaluation which assigns True (t) or False (f) to each sentence. By using this machinery an affirmative particular proposition which is necessary is interpreted as follows:

- (I) $n(\Box A i B) = t$ iff
 (i) for some x $n(x \in B) = t$ and $n(x \in_n A) = t$
 or (ii) for some x $n(x \in_n B) = t$ and $n(x \in A) = t$ ⁷¹

The reason for condition (ii) is to justify the conversion of universal necessary affirmative propositions into the corresponding particulars. But this view has a consequence which shows that (I) does not square with Aristotle's position. I would be inclined to think that if we take a

Aristotle's use of the modal operators. I think that his view is misleading, since he takes the *de re* reading in such a way that the modal operator is supposed to modify only the predicate. On this basis Patterson claims that according to Aristotle the modal operator is something which affects the copula. However, saying that in a *de re* reading of a necessary proposition the modal operator modifies only the predicate must be taken *cum grano salis*. In (A1) for instance, the modal operator is in any case a propositional modifier. To show this, it is sufficient to point out that $B(a) \rightarrow \Box A(a)$ is an instance of (A1). Therefore, even in the *de re* reading of modal propositions the modal operator affects the copula, but in a sense different from that in which it affects this in the *de dicto* reading. G. Striker (above, n. 63), 3 n. 8 has made a similar point.

⁶⁹ Cf. Johnson 1993, 171–82.

⁷⁰ I am not sure that Johnson's paper aims to offer an interpretation of Aristotle's text.

⁷¹ Cf. Johnson 1993, 171–72.

predicate in the category of substance, e.g. "man," or "animal," we are entitled to state that what is in the extension of such a predicate is linked to the predicate by the $\in_n$ -relation: if Peter is a man, then he is necessarily a man. Generally speaking, if 'S' is a predicate in the category of substance, we are allowed to state

$$(II) \quad \forall x(x \in S \rightarrow x \in_n S)$$

The consequence of this way of putting things is that every particular affirmative (true) proposition whose terms are terms in the category of substance are necessary propositions. For instance, not only propositions such as

$$(19) \quad \text{some man is musical}$$

are necessary according to (I), provided that (II) holds, but also

$$(20) \quad \text{some white thing is an elephant}$$

and this looks very strange from an Aristotelian perspective, where (19) and (20) are rather considered as accidental predications and therefore non-necessary propositions. Johnson's analysis of mixed syllogisms would deserve a more careful examination because it has the great advantage of offering a consistent reconstruction of the Aristotelian theses. However, what I have said is, I hope, sufficient to show that his construction cannot be taken as an interpretation of the Aristotelian notion of necessity.⁷² As an interpretation of Aristotle I still think that it is

⁷² By taking Patterson's definition of a universal affirmative necessary proposition, changing his definition of a universal necessary negative proposition, and taking weak necessity as the only interpretation of the corresponding modal operator, Paul Thom (1991) is able to overcome some of the difficulties of Patterson's interpretation, in particular the obstacle that the rules of conversion require strong necessity and inferences such as *Barbara LXL* require weak necessity. He is able to validate all Aristotelian syllogisms and disprove all the inferences that Aristotle disproves except *Baroco XLL* and *Bocardo LXL*, which are invalid according to Aristotle (cf. *Anal.Pr.* 1.10, 31a15–17 and 11, 31b37–32a5) and valid in his system. All this allows Thom to claim that Aristotle's theory is not incoherent but only contains a few minor mistakes. However, to achieve this result Thom uses a semantic for necessary particular affirmative propositions which is very similar to the semantic of Johnson, and consequently the same objection we have raised against Johnson can be leveled at him.

Becker's view that we must favour, and with this conclusion in mind I come back to Theophrastus.

VIII.

If Becker's interpretation of Aristotle is accepted, we at once have a clue as to the way in which Theophrastus' position must be understood. His refusal to accept both *Barbara LXL* and *Barbara XLL* can easily be explained by the hypothesis that he did not allow any shifting in the scope of the modal operators. Since the conversion rules prevent a *de re* reading of necessary propositions, we must consequently reject the two *Barbaras*, the first of which can only hold on a *de re* reading of the modal operators.

Let us look for some confirmation of this hypothesis. If we examine the argument on the strength of which Theophrastus, as reported by our sources, rejected *Barbara LXL*, we invariably find that it involves the idea of disjunction or separation. This is how Alexander of Aphrodisias presents Theophrastus' proof:

(D) If *B* applies to all *C*, but not of necessity, it is possible for it also at some time to be disjoined from it; when *B* has been disjoined from *C*, then *A* too will have been disjoined from it; but if this is so, then it will not apply to it of necessity.⁷³

The same argument is repeated elsewhere,⁷⁴ and it is used to reject the other *Barbara*, i.e. *Barbara XLL*, as well.⁷⁵ The idea is simple. If the minor premiss of *Barbara LXL*, i.e. *BaC*, is categorical, it may happen that *B* is disjoint from *C*. But if *B* is disjoint from *C*, *A* cannot be applied to *C* in a necessary way, since when *B* is disjoint from *C*, then *A* is disjoint from it. It should not come as a surprise that Bochenski with reference to this proof points out that Theophrastus once more uses his spatial scheme to draw a logical inference.⁷⁶ However, we have seen that we can offer a precise counterpart to the metaphor of separation. By adopting the same symbolism we have introduced earlier, we can translate *Barbara LXL* into:

⁷³ Alex. *In Anal.Pr.* 124.18–21 (= 106A FHS&G).

⁷⁴ Cf. e.g. Philop. *In Anal.Pr.* 124.9ff. (= 106D FHS&G); Ps.-Ammon. *In Anal.Pr.* 38.38–39.10 (= 106E FHS&G).

⁷⁵ Cf. Alex. *In Anal.Pr.* 132.23–34 (= 106B FHS&G).

⁷⁶ Cf. Bochenski 1947, 80.

$$(T1) \quad \forall b \exists a \Box (b=a), \forall c \exists b (c=b) \vdash \forall c \exists a \Box (c=a)$$

If this is the formal counterpart of Theophrastus' reading of *Barbara LXL* we immediately understand why this mood is invalid. As a special case of its antecedent we may take:

$$(T2) \quad \Box b_1=a_1, c_1=b_1$$

If, with Aristotle and probably Theophrastus, we do not agree that every identity is necessary,⁷⁷ it is pretty clear that we cannot deduce

$$(T3) \quad \Box c_1=a_1$$

from (T2). Take for instance necessity in term of omnitemporality. If c_1 is the same as b_1 and b_1 is always the same as a_1 , we cannot conclude that c_1 is always the same as a_1 , since it is not implied that c_1 is always the same as b_1 . On the other hand, it is obviously valid to deduce

$$(T4) \quad c_1=a_1$$

from (T2), and this allows us to validate *Barbara LXL*. Moreover, *Barbara XLL* must be rejected for the same reason for which *Barbara LXL* is disproved. If (T3) cannot be inferred from (T2), then on the same ground is one allowed to deny that (T3) is entailed by

$$(T5) \quad b_1=a_1, \Box c_1=b_1$$

In this way we can perfectly understand why Theophrastus uses the same argument to reject *Barbara LXL* and *Barbara XLL*.⁷⁸

Our reconstruction of Theophrastus' position has a further advantage: it explains in a simple way why he interpreted modal propositions invariably *de dicto*, without allowing any shifting in the scope of the modal operators. If we render, as we have done, a universal affirmative categorical proposition such as *AaB* in terms of

$$(A9) \quad \forall b \exists a (b=a)$$

⁷⁷ *Top.* 1.7, 103a29ff.

⁷⁸ Cf. Alex. *In Anal.Pr.* 132.23–34 (= 106B FHS&G).

and we try to add a modal operator to it, only two relevant possibilities remain: either we put it before or after the quantifiers. This choice is important for some modern systems of modal logic, but it does not affect our problem: in both cases *Barbara LXL* and *Barbara XLL* are disproved.⁷⁹

The conclusion is that Theophrastus was able to provide a perfectly coherent theory for necessary syllogisms, based on his general notion of a proposition interpreted in terms of identity.⁸⁰ Instead of a spatial scheme he used a logically sophisticated pattern which allowed him to alter Aristotle's system in a substantial way, and thus to avoid its contradictions. From this point of view his work as a logician is not the humble achievement of a commentator, but the result of a profound and original insight.⁸¹

Appendix 1

We sketch a proof of (TR2) from **T31**, which is a theorem of S5 (Hughes-Cresswell, p. 52)

(TR2): $\Box(P \rightarrow \Box Q) \leftrightarrow (\Diamond P \rightarrow \Box Q)$

Proof.

T31: $\Diamond(P \wedge \Diamond Q) \leftrightarrow (\Diamond P \wedge \Diamond Q)$

(1) $\Diamond(P \wedge \Diamond \neg Q) \leftrightarrow (\Diamond P \wedge \Diamond \neg Q)$

By sub $\neg Q$ for Q

(2) $\neg \Diamond(P \wedge \Diamond \neg Q) \leftrightarrow \neg (\Diamond P \wedge \Diamond \neg Q)$

By $(P \leftrightarrow Q) \leftrightarrow (\neg P \leftrightarrow \neg Q)$

(3) $\Box \neg (P \wedge \Diamond \neg Q) \leftrightarrow (\Diamond P \rightarrow \neg \Diamond \neg Q)$

By def. $\neg \Diamond$ and $\neg(P \wedge Q) \leftrightarrow (P \rightarrow \neg Q)$

⁷⁹ The same result follows from the third remaining possibility, namely the possibility of putting the modal operator between the two quantifiers, so that

(A10) $\forall b \Box \exists a(b=a)$

is obtained. Neither *Barbara LXL* nor *Barbara XLL* can be proved, the only valid mood being *Barbara LXX*.

⁸⁰ Of course, this does not mean that the whole of his modal syllogistic is free from contradictions. But that is a different story.

⁸¹ I would like to express my gratitude to Jan van Ophuijsen for his comments on the version of this paper read at the Leiden conference. His observations led me to support my basic view with new arguments and to revise substantially my criticism of Patterson's interpretation.

- (4) $\Box(P \rightarrow \neg \Diamond \neg Q) \leftrightarrow (\Diamond P \rightarrow \Box Q)$ By $\neg(P \wedge Q) \leftrightarrow (P \rightarrow \neg Q)$
and def. $\neg \Diamond \neg$
- (5) $\Box(P \rightarrow \Box Q) \leftrightarrow (\Diamond P \rightarrow \Box Q)$ By def. $\neg \Diamond \neg$

Appendix 2

The proof of *Barbara XLL* within the frame of Nortmann's reconstruction of Aristotle's modal syllogistic is as follows. What we have to demonstrate is:

$$\forall x \Box (B(x) \rightarrow A(x)), \forall x \Box (C(x) \rightarrow \Box B(x)) \vdash \forall x \Box (C(x) \rightarrow \Box A(x))$$

and we assume that (TR1) and (TR2) hold good. For convenience let us split equivalence (TR2) in its two entailed implications, i.e.

$$(TR2^+) \Box(P \rightarrow \Box Q) \rightarrow (\Diamond P \rightarrow \Box Q)$$

and

$$(TR2^-) (\Diamond P \rightarrow \Box Q) \rightarrow \Box(P \rightarrow \Box Q)$$

Proof.

1	(1) $\forall x \Box (B(x) \rightarrow A(x))$	A
2	(2) $\forall x \Box (C(x) \rightarrow \Box B(x))$	A
3	(3) $\Diamond C(a)$	A
1	(4) $\Box (B(a) \rightarrow A(a))$	1 UE
2	(5) $\Box (C(a) \rightarrow \Box B(a))$	2 UE
	(6) $\Box (B(a) \rightarrow A(a)) \rightarrow (\Box B(a) \rightarrow \Box A(a))$	TR1(S)
1	(7) $\Box B(a) \rightarrow \Box A(a)$	4,6 MPP
	(8) $\Box (C(a) \rightarrow \Box B(a)) \rightarrow (\Diamond C(a) \rightarrow \Box B(a))$	TR2 ⁺ (S)
2	(9) $\Diamond C(a) \rightarrow \Box B(a)$	5,8 MPP
2,3	(10) $\Box B(a)$	3,9 MPP
1,2,3	(11) $\Box A(a)$	7,10 MPP
1,2	(12) $\Diamond C(a) \rightarrow \Box A(a)$	3,11 CP
	(13) $(\Diamond C(a) \rightarrow \Box A(a)) \rightarrow \Box (C(a) \rightarrow \Box A(a))$	TR2 ⁺ (S)
1,2	(14) $\Box (C(a) \rightarrow \Box A(a))$	12,13 MPP
1,2	(15) $\forall x \Box (C(x) \rightarrow \Box A(x))$	14 UI

4

Theophrastus' Rhetorical Works: One Rhetorical Fragment the Less, One Logical Fragment the More

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In the list of Theophrastus' works on rhetoric and poetics as given in the new collection under 666 FHS&G one finds twenty-four items, some of them (2 and 17) subdivided into (a) and (b). Most of these titles come from the list of Theophrastus' works in Diogenes Laertius 5.42-50. In all but five cases (2, 6, 17, 22 and 23, the last two on comedy and on the ludicrous respectively), Diogenes is our only source for them. The responsible editor, W. W. Fortenbaugh, also refers to several titles of works which other scholars had placed in the group of rhetorical treatises, but his classification is different. This variation is explained by the fact that Diogenes' list does not give any indication of the type of work to which any title belongs, which leaves scholars free to devise their own arrangement.

In what follows I will discuss the place or the wording of a few titles, and especially that of 17b, thereby focusing on the nature and contents of 683 FHS&G. The editors have declined to arrange the fragments according to known works (cp. vol. I, pp. 7-8). Nevertheless, I will argue, even by their arrangement of the titles they sometimes suggest too much, or too little.

I. Some Minor Ingredients

My first observations concern 2a and b: *Περὶ τεχνῶν ῥητορικῶν εἶδη ξα΄* and *Τέχνηαι*. My interest is in the second title and its classification by Fortenbaugh as belonging to 2 and not to 1, *περὶ τέχνης ῥητορικῆς*. In 678 FHS&G John of Sardes says: *Θεόφραστος ἐν ταῖς Τέχνηαις διεῖλε διχῶς τὸ ἐγκώμιον*. The capitalisation of *Τέχνηαις* is due to editors; the word may also be written as *τέχνηαι* with a lower case *tau*. In that case it could just as well refer to a work entitled *Τέχνη ῥητορικῆ*. References to Aristotle's *Τέχνη ῥητορικῆ* by ancient writers show a variety of forms. I quote from Kassel's edition the following ascriptions: on 1355a20 Syrianus *In Hermog. stat.* (2.59.9) *ἐν ταῖς ῥητορικαῖς τέχνηαις*, cp. idem at 1356b28–32; Olympiodorus *In Plat. Alcib. proem.* 71.7 at 1359b18–23; idem at 1365a29; *ἐν τέχνηαις* Dionysius Hal. *Ad Amm.* 1.12; cp. idem, *ibid.* 11 *ἐν τῇ δευτέρᾳ βύβλῳ τῶν τεχνῶν* at 1397b27ff.; Sextus Emp. *Adv. Math.* 2.8 *ἐν τῷ προτέρῳ τῶν ῥητορικῶν τεχνῶν* at 1354a11 and Quintilian 3.6.49 *in rhetoricis* at 1374a2–3 over against Gregorius Cor. *In Hermog. method.* 1269.14 Walz at 1358b5–6 *ἐν τῷ πρώτῳ τῆς οἰκείας ῥητορικῆς* and Quintilian 5.10.17 *in secundo de arte rhetorica libro*. Eustathius speaks of *ἐν τῇ αὐτοῦ ῥητορικῇ* at 1400b17 and 23. Dionysius continually uses the title *τέχνηαι* when discussing the priority of Demosthenes' speeches to Aristotle's *Rhetoric*. It follows that it is possible for the words *ἐν ταῖς τέχνηαις* used by John of Sardes to refer to a work called *τέχνη ῥητορικῆ*, and this title we know from Diogenes' list (1 of 666 FHS&G).

My second comment has to do with the mysterious title *Περὶ τεχνῶν ῥητορικῶν εἶδη ξα΄*. Usener thinks of a collective title for all the rhetorical treatises together, accepts one of the numbers found in the manuscripts, viz. ιζ΄ (17)¹ and reconstructs this collection. In order to arrive at a total of seventeen books he changes the number of books of the treatise *Περὶ λέξεως* from α΄ (1) to δ΄ (4).² Although his view got an enthusiastic welcome from none less than Regenbogen,³ there is a lot wrong with it. The very system of Diogenes' list makes the change, small in itself, from α΄ to δ΄ implausible: if *Περὶ λέξεως* contained four

¹ The other numbers are ξα΄ (61) and two ghost numbers (ζα΄ and ζβ΄).

² H. Usener, *Analecta Theophrastea* (Bonn 1858) 19–20 (= *Kleine Schriften* [Leipzig 1914] I.30–31).

³ O. Regenbogen, "Theophrastos," *RE Suppl.* VII (1940) 1523.

books, Diogenes would have written *Περὶ λέξεως α' β' γ' δ'*. If the number of books of *Περὶ τεχνῶν ῥητορικῶν* had been seventeen, Diogenes would have written all the numbers from α' β' up to and including ιζ', as is shown by the number of books given for *Ἐπιχειρημάτων* (§43) and *Πρώτων προτάσεων* (45), to take just a few examples. There are two exceptions, *Θέσεις* κδ' and *Νόμων κατὰ στοιχείον* κδ' (44), but these concern numbers higher than 19. Accordingly, one is inclined to accept the alternative number ξα', 61. But here the part before the number already looks wrong, for it cannot mean "On Kinds of Rhetorical Arts," as if the Greek was *περὶ τεχνῶν ῥητορικῶν εἰδῶν*. It looks as if εἶδη is already corrupt. Accordingly, the *crux* should have been put before, not after εἶδη.⁴

II. Take 683 FHS&G ...

Of greater interest are the titles given under 17, viz. *Περὶ λέξεως α'* and *Περὶ τῶν τοῦ λόγου στοιχείων*. The first title is found in Diogenes' list and also, without a number of course, in Dionysius of Halicarnassus *De Lysia* and *De compositione verborum*. Whether the editor is right to refer here to a third source, the Anonymus Coislinianus, is a question I shall come back to. First, however, let us look at Fortenbaugh's designation of *Περὶ τῶν τοῦ λόγου στοιχείων* as "another title of the book *On Style*, which seems to pertain especially to the first part of the book."

The title *Περὶ τῶν τοῦ λόγου στοιχείων* occurs in the well known fragment from Simplicius (683 FHS&G). Simplicius here uses, as he says, Porphyry's books *To Gedalius* and *By Question and Answer*.⁵ Porphyry states that the subject of Aristotle's *Categories* is predicates, the simple sounds "in so far as they are significant, but not in so far as they are simply expressions. For in so far as they are expressions (λέξεις), they belong to other subjects, which are worked up [?? DMS] by Theophrastus in *On the Elements of Speech* (or: *Sentence*) and by his associates [?? DMS]" (ἄλλας ἔχουσι πραγματείας, ἃς ἐν τῷ *Περὶ τῶν τοῦ λόγου στοιχείων* ὅ τε Θεόφραστος ἀνακινεῖ καὶ οἱ περὶ αὐτὸν γεγραφότες).

⁴ At the end I come back to Usener's view about *Περὶ λέξεως* consisting of four books.

⁵ As the data given in 683 FHS&G are not in Porphyry's surviving *By Question and Answer* (CAG 4.1), Simplicius must have found them in the lost *To Gedalius*.

Here the final words look wrong as they stand, for οἱ περὶ αὐτὸν γεγραφότες οἶον + question is impossible Greek, even if we put a comma before the participle. We should either, with Stroux,⁶ read οἱ περὶ αὐτῶν γεγραφότες or delete the participle and keep to the commonly accepted οἱ περὶ αὐτόν. The MSS have either αὐτῶν or αὐτόν. The expression οἱ περὶ Θεόφραστον is very common in the commentaries on Aristotle's works and most often means no more than the person indicated by the accusative, in this case Theophrastus,⁷ but this explanation is impossible here. I prefer Stroux's reading of the text: "and those who have written on these subjects."⁸

The items mentioned by Theophrastus and others in their writings on φωναί *qua* λέξεις are (1) the status of ὄνομα, ῥῆμα in comparison with σύνδεσμος, ἄρθρον etc.; (2) κυρία λέξεις and metaphorical expression; (3) πάθη (modifications of speech, such as apocope, aphaeresis); (4) simple, composite and decomposite expressions and (5) qualities/types (of style). The list, it has been noted before, is a mixed bag, and one wonders why Theophrastus should speak about logical and grammatical matters in the context of a rhetorical treatise.

Interpretations of this text have been varied. Schmidt thinks that Περὶ τῶν τοῦ λόγου στοιχείων is the title of the book elsewhere called Περὶ λέξεως, but Usener suggests that we here have the title of the first book of Περὶ λέξεως, which is supposed to have comprised four books. His view is adopted by his pupil Rabe, by Regenbogen, and, notwithstanding his disagreeing with Usener about the correct number of books, also by Fortenbaugh, although with a slight modification, as we have seen.⁹ Mayer disagrees, restoring the title as follows: ἐν τῷ περὶ (λέξεως περὶ

⁶ J. Stroux, *De Theophrasti virtutibus dicendi* (Leipzig 1912) 24.

⁷ Cp. 87C and E (FHS&G (but 87A, B and D Θεόφραστος only); 90B in contrast with 90A; 96A compared to 96B, 106A to B etc.

⁸ The verb ἀνακινεῖ ('works up', Fortenbaugh) is connected by Simplicius at other places with expressions like πολλὸν βόρβορον λόγων (*In Cael.* 119.11) and πολλῶν καὶ καλῶν λόγων ἔσμὸν (*In Cat.* 186.24) and there it means 'stir up'. In *In Phys.* (7.31) we find τὰ ἐνταῦθα ζητούμενα ἀνακινεῖν, where the same interpretation will do (cp. Plato, *Meno* 85C). Therefore, I think, at our place the verb comes close to 'stir up, bring up, touch upon, mention in passing'. For πραγματεῖαι = 'subjects, arguments, researches' cp. Simplicius *In Cat.* 8.12.1, 8.13.1 etc.

⁹ M. Schmidt, *Commentatio de Theophrasto rhetore* (Halle 1839) 38; Usener 1858, 9; H. Rabe, *De Theophrasti libris Περὶ λέξεως* (Bonn 1890) 6; Regenbogen 1940, 1523.

τῶν) τοῦ λόγου στοιχείων,¹⁰ thereby keeping to the number of one book for Περὶ λέξεως and relating the other "title" to items of discussion. Stroux also rejects the notion of a book-title: he too thinks of an indication of an argument. In his view the items listed by Porphyry were covered in the parts of Περὶ λέξεως on the four virtues.¹¹ By Grube's account, the passage just tells us "that Theophrastus wrote a book on the parts of the proposition."¹² I am not aware of any other interpretations. Leaving Grube's view aside, the diversity of opinions can be reduced to two fundamental positions: Περὶ τῶν τοῦ λόγου στοιχείων either (1) is a title of a part of the book Περὶ λέξεως, or its alternative, or (2) it indicates a part of the argument of this book without implying just where in the book this discussion was placed—although this was probably at the beginning. As for including a discussion of grammatical matters in a book on rhetoric, it was pointed out by such scholars as Rabe and Stroux that Aristotle had done the same thing in his *Poetics*, and in his discussion of the ἀρετὴ λέξεως in *Rhet.* 1404b27–28 had referred to that part of his *Poetics*. At the time of Aristotle and Theophrastus there had not yet been written any separate grammars; therefore Theophrastus merely followed the usage of his age by including this subject in his own work on rhetoric. However, no one has explained why Theophrastus should have wished to start with a logical subject if he had decided to treat grammatical items in a rhetorical context.

What I shall argue for in this paper is threefold: (a) Viewed both in its immediate and its wider context, the fragment suggests a provenance from a logical work; (b) the list of items touched upon functions as a kind of detailed *praeteritio*, for it explains what Aristotle does not discuss in his *Categories* and *De interpretatione*; (c) the list may well contain Theophrastean material, but it is one of the kind that allowed items easily to be added or omitted. I will add the suggestion that two texts from Ammonius, one of which contains a reference to Theophrastus, are part of one consecutive argument.

¹⁰ A. Mayer, *Theophrasti Περὶ λέξεως libri fragmenta* (Leipzig 1910) VI and 15. From p. LI (Corrigenda) it would follow that later he wished to read ἐν τῷ περὶ (λέξεως περὶ) τῶν τοῦ λόγου στοιχείων.

¹¹ Stroux 1912, 14; 23–26. My interpretation of Stroux' position may, however, be wrong.

¹² G. M. A. Grube, "Theophrastus as a Literary Critic," *TAPA* 83 (1952) 177.

III. ... add its context ...

As Fortenbaugh has well reminded us in his paper on 78 FHS&G (= Fr. 65 Wimmer), from Ammonius' commentary on *De interpretatione*, the original context of fragments should be taken into account with a view to their interpretation. As to our text, Stroux and Grube paid more attention to its context than other scholars, but still, I think, not enough.

In the introduction to his commentary on the *Categories*, Simplicius begins by giving a survey of the ten points to be discussed in connection with Aristotle's works, the last of these being how to study a particular work. At p. 9 ("Ἰδωμεν οὖν κτλ.") he comes to the *Categories* and applies to it this tenth point, which involves several topics. The first of these is the σκόπος of the book: its subject. He discusses the views of those who select either the simple sounds or things or thoughts as its subject. Thus one group of interpreters stated that the *Categories* are not, as others had claimed, concerned with "simple sounds," for "it is not up to a philosopher to discuss sounds, but rather to a grammarian, who looks at their modifications, their formations and transformations as well as their proper uses and the ιδέαι."¹³ Simplicius proves all three groups of interpreters to be wrong. At p. 10 (Ἰδωμεν δὲ καὶ τοὺς τελεώτερον ἀντιλαμβάνομένους) he enters into a survey of the opinions of "those who tackled this matter more completely," first of all Alexander of Aphrodisias.¹⁴ His explanation of the σκόπος is that Aristotle discusses the simple and most generic parts of the λόγος which signify the simple things and the single thoughts about these things (10.17–19). Then comes the part from Porphyry, which, with Stroux, I think, runs on to p. 11.23. After this part Simplicius says that Porphyry also added quotations from Boethus,¹⁵ which come down to the same opinion.¹⁶ Therefore, Boethus says, conjunctions (σύνδεσμοι) are found in the λέξεις, but fall outside the categories, since they do not sig-

¹³ 9.20–22: Οὐ γὰρ φιλοσόφου τὸ περὶ φωνῶν θεωρεῖν, ἀλλὰ γραμματικοῦ μᾶλλον τὰ τε πάθη καὶ τοὺς σχηματισμοὺς καὶ παρασχηματισμοὺς αὐτῶν καὶ τὰς κυριότητας τὰς ιδέας ἐπισκεπτομένου.

¹⁴ Who followed Alexander of Aegae (*RE* s.v. Alexandros [92]). First century A.D. His book on the *Categories* was used by Alexander Aphrod.

¹⁵ Boethus of Sidon, the Peripatetic (*RE* 9 s.v.), not the earlier Stoic (4 s.v.). See P. Moraux, *Der Aristotelismus bei den Griechen* (Berlin 1973) I.143–64.

¹⁶ In this part (11.24–26) the expression καθὸ σχέσιν ἔχουσιν αἱ λέξεις πρὸς τὰ ὄντα reminds one of Ammonius' quotation from Theophrastus (78 FHS&G) διττῆς γὰρ οὐσης τῆς τοῦ λόγου σχέσεως.

nify any of the things that are (τὰ ὄντα).¹⁷ Now (p. 11.30) Simplicius draws his own conclusion, that the subject of the *Categories* are "the simple sounds in so far as they signify the simple and primary ὄντα, but not in so far as they are transformed or remodelled, accept such and such modifications, or have such and such ιδέαι, subjects which the inquiry about λέξεις qua λέξεις is looking into."¹⁸

This overview of Simplicius' treatment of the σκόπος of the *Categories* shows that both the commentators he mentions and he himself start from an opposition between looking at words as signifying something and looking at words as sequences of letters. In this connection they first discuss the parts of the proposition, specifically the question whether a conjunction or an article is part of a proposition or stands outside it, and then go on to deal with changes in forms, formations and derivations of words etc. To Porphyry and Simplicius, therefore, what Theophrastus *et alii* mentioned has its rightful place in a discussion on the subject of the *Categories*.

From this conclusion it follows that one should not assume *a priori* that Theophrastus' discussion comes from a rhetorical treatise; one might sooner suppose that he gave thought to these matters in one of his logical works.

At this point I already refer to the discussion of 78 FHS&G (Ammonius, *In Int.* 4 (CAG 4.5, p. 65.31–66.10). According to many scholars this fragment comes from a rhetorical treatise, preferably Περὶ λέξεως or, at any rate, contains parts of Theophrastus' rhetorical theory—thus e.g. Schmidt and Innes.¹⁹ However, Fortenbaugh has convincingly shown that the fragment stems from a discussion on logic and refers in all probability to Theophrastus' *De affirmatione et negatione*.²⁰

¹⁷ 11.26–28: διό, φησίν, οἱ σύνδεσμοι ἐν μὲν τῇ λέξει εὐρίσκονται, τῶν δὲ κατηγοριῶν ἐκπίπτουσιν· οὐδὲν γὰρ τῶν ὄντων δηλοῦσιν κτλ.

¹⁸ 11.32–12.1: ... περὶ φωνῶν μὲν ἀπλῶν καὶ λέξεων, διότι λογικῆς ἐστὶ πραγματείας προοίμιον· καθὼ δὲ σημαντικαὶ τῶν ὄντων εἰσὶ τῶν πρώτων καὶ ἀπλῶν, ἀλλ' οὐκ καθὼ παρασχηματίζονται ἢ συσχηματίζονται ἢ πάθη τοιάδε ἀναδέχονται καὶ ιδέας ἔχουσι τοιάδε, ἅπερ ἢ περὶ τῶν λέξεων ὡς λέξεων ἐπίσκεψις πολυπραγμονεῖ.

¹⁹ Regenbogen 1940, 1383; M. J. Lossau, *Untersuchungen zur antiken Demosthenesexegese* (Bad Homburg 1964) 36–52; Doreen Innes, "Theophrastus and the Theory of Style," *RUSCH* 2 (1985) 254–45.

²⁰ W. W. Fortenbaugh, "Theophrastus, Fragment 65 Wimmer," *AJP* 111 (1990) 168–75.

Consequently, it should no longer be used for the reconstruction of Theophrastus' rhetoric.²¹

IV. ... and its wider context; ...

This tentative inference is corroborated by considering the wider context of Simplicius' discussion, in the sense of the tradition of which it is a part. In order to do so I must go back to Aristotle's *Categories* as well as his *De interpretatione*. In the *Categories* Aristotle introduces definitions of things which are homonymous, synonymous and paronymous, and distinguishes between "things said in combination and those said without" (1a1–19), which distinctions run parallel to those between "single words" and "groups of words." Homonymous and related words invite a grammatical interpretation. Such an impulse is even stronger in *De interpretatione*, for here Aristotle defines ὄνομα, πᾶσις ὀνόματος, ῥῆμα, πᾶσις ῥήματος and λόγος and then restricts the discussion to the statement-making sentence in so far as there is truth or falsity in it. For this reason he excludes e.g. a prayer, after which he continues thus: "The present investigation deals with the statement-making sentence; the others we can dismiss, since consideration of them belongs rather to the study of rhetoric or poetry" (17a1–7).²² In chapter 5 he talks about σύνδεσμος in virtue of which a single sentence is one (17a15–17) but neglects this aspect in the rest of the treatise.

Whatever the fate of the two treatises after Aristotle's time, from the rediscovery of his works in the first century B.C. onward the interpretation of the subject of these works raised questions, as witness the fact that already Boethius of Sidon discusses the status of the σύνδεσμοι. By that time, however, a full-blown grammar had been developed, in which eight or nine parts of speech, commonly called μέρη τοῦ λόγου, were distinguished. These distinctions were no longer made for reasons of logic. Further, the theory of poetry had been definitely delegated to the γραμματικός, the grammarian, or literary scholar. In addition to this there is the fact that in both his *Rhetoric* and his *Poetics* Aristotle freely

²¹ H. B. Gottschalk, "An Errant Fragment of Theophrastus," *CQ* 42 (1992) 529–33 disagrees but does not convince. His main argument that the original context of the Theophrastus fragment was different from the one to which Ammonius transferred it, was implicitly answered by Fortenbaugh 171.

²² Aristotle's *Categories and De Interpretatione*, tr. J. L. Ackrill (Oxford 1963).

uses the notions of ὄνομα, ῥῆμα, and σύνδεσμος, and in his *Poetics*, ch. 20, also speaks of μέρη τῆς λέξεως—which notion, however, has a much wider reach than “part of speech”—and further distinguishes something called ἄρθρον, ‘article’. In ch. 21 Aristotle goes on to differentiate between simple and double words and to list kinds of words, such as standard, exotic, metaphor, lengthened, reduced, etc. Greek commentators from the first century B.C. onwards, all of whom had had a basic training in grammar and rhetoric at school, must have had difficulty in bringing Aristotle’s statements and definitions into harmony with the notions and terms of contemporary grammars. Thus²³ Ammonius tells us (*In Int.* 13.19–14.16) that Alexander of Aphrodisias thought that under Aristotle’s ὀνόματα are to be included also ἐπιρρήματα, ἀντωνυμῖαι καὶ [ἡ] παρὰ τοῖς γραμματικοῖς [καλουμένη προσηγορία].²⁴ Another point to be taken into account is the conception of the Aristotelian treatises from the *Categories* up to the *Posterior Analytics* in the traditional order, but with the addition of the *Poetics* and *Rhetoric*, as being Aristotle’s own introductory collection, the *Organon*. Thus we often read explanations of the relationship between the subjects of the various treatises as a progression from single sounds through single statements to syllogisms.²⁵ We should therefore view the introductions and some parts of the commentaries to Aristotle’s *Categories* and *De interpretatione* as constituting a whole or, at least, as being related to one another.²⁶

V. ... meanwhile mix two fragments ...

Let us take a single, but an important, example to illustrate this final point. In his introduction to the *Categories*, Simplicius (p. 9.17–21) refers to people who think that it is the grammarian’s, not a philosopher’s business to consider sounds under the aspects of their πάθη, σχηματισμοί, παρασχηματισμοί, κυριότητες and ιδέαι.²⁷ Almost the

²³ Cp. Porph. *In Cat.* 58.30–59.20; 61.3–62.10; Dexippus *In Cat.* 11.4–25; Olympiod. *In Cat.* 20.13–21.14.

²⁴ προσηγορία, ‘appellative’, is a word-class distinct from ὄνομα, ‘proper name’. This Stoic distinction is rejected by many grammarians, who classify appellatives and proper names as subclasses of nouns.

²⁵ E.g. Ammonius *In Cat.* 14.2–15.2.

²⁶ Cp. e.g. Ammonius’ reference in his introduction to *De interpretatione* (1.21–2.9) to that of the *Categories* (5.9–17).

²⁷ 9.17–21 (see above); cp. 11.30–35.

same terms recur in Ammonius' explanation of *De interpretatione* 17a1–7. Ammonius talks about the εἶδη τοῦ ἀπλοῦ λόγου other than the ἀποφαντικός²⁸ and says that Aristotle relegates the discussion of these to works on rhetoric or poetics. He explains this dismissal thus: “rhetoricians inquire into the rhythms, periods and figures of these λόγοι, grammarians [sic! DMS] into the metres and the σχηματισμοί or συσχηματισμοί or παρασχηματισμοί and κλίσεις (flexions) etc.; moreover, they are wont to imitate people who address others, or order or ask or pray to them, and often they fulfil these functions speaking in their own person.”²⁹ The automatic switch from Aristotle's ποιητική as the proper discipline to discuss linguistic matter to γραμματική is significant and occurs in both commentaries. The various items of πάθη and σχηματισμοί are found over and over again.

But more needs to be said. I already mentioned 78 FHS&G, another fragment taken from Ammonius' commentary, where it comes shortly after the text just quoted. There (65.2–12) Ammonius had given instances of the items discussed by rhetoricians and grammarians. In 65.13–30 he once again states that *De Int.* only discusses the ἀποφαντικός λόγος, and goes on to refer to Theophrastus' statement on the double relationship of the λόγος, on the one hand to the audience, on the other hand to things (65.31–66.6). The first relationship is a matter of discussion for students of poetics and rhetoric, for it is their task to At this moment one would expect a list of these tasks similar to that given in the previous part (65.2–12). But it turns out that Ammonius only lists the tasks peculiar to a rhetor: ἐκλογή and σύνθεσις, out of which the ἰδέαι are formed. These are instanced by σαφήνεια and γλυκύτης, two terms which are well known as ἰδέαι deriving from Hermogenes' theory. Hereafter Ammonius lists other items, all of them familiar notions of rhetoric. When comparing these two lists of Ammonius, the conclusion seems inevitable that both texts are parts of

²⁸ See D. M. Schenkeveld, “Stoic and Peripatetic Kinds of Speech Act,” *Mnemosyne* 37 (1984) 294–300.

²⁹ 65.4–12: ῥητιροκῆς δὲ ἢ ποιητικῆς οἰκεῖαν εἶναι τὴν περὶ τούτων θεωρίαν, διότι οἱ τούτων ἐκατέραν ἐπιτηδεύοντες περὶ τε τοὺς λόγους αὐτοὺς καθ' αὐτοὺς ἔχουσι, ῥήτορες μὲν τοὺς ῥυθμοὺς αὐτῶν καὶ τὰς περιόδους καὶ τὰ σχήματα πολυπραγμονοῦντες, γραμματικοὶ δὲ τὰ τε μέτρα καὶ τῶν πρώτων λέξεων τοὺς σχηματισμοὺς ἢ συσχηματισμοὺς ἢ παρασχηματισμοὺς καὶ κλίσεις καὶ ὅσα τοιαῦτα, καὶ ἔτι μιμῆσθαί τινας εἰώθασι καλοῦντας ἐτέρους ἢ προστάττοντας ἢ ἐρωτῶντας ἢ εὐχομένους περὶ τινῶν, πολλάκις δὲ καὶ αὐτοπροσώπως κατὰ τινας τῶν ἐνεργειῶν τούτων ἐνεργοῦντας.

one running argument on the subjects at home in rhetoric and poetics, but not in the *Categories* or *De interpretatione*. Aristotle had relegated these subjects to rhetoric or poetics, and Ammonius obligingly first (65.2–12) mentions an ἔργον of rhetoric but has more to say on grammar. In the second part (65.31–66.6) he can now omit to list tasks of the grammarian and focus on those of the rhetorician. His list is an ascending series, in which the part on σύνθεσις, having already been mentioned in the first part, is kept short, and which has its climax in the ἰδέαι.³⁰

VI. ... remove 683 FHS&G ...

Against this background let us once again consider the Porphyry/Simplicius text. Its list of subjects covered by Theophrastus and others begins as follows: “whether (just the) noun and verb are elements of the λόγος, or also ἄρθρα and σύνδεσμοι and certain others—these too are parts of expression (λέξις), but noun and verb (are parts) of the λόγος.” The distinction between λόγος and λέξις is Aristotelian insofar as in *Poetics* 21 λόγος is a μέρος τῆς λέξεως, but also single sounds, syllables etc. are such. However, μέρος λόγου as part of speech, word-class is a common term in later times, although in *De Int.* 4 the μέρη of the λόγος are parts of the statement-making sentence. It looks as if commentators are troubled by Aristotle’s formula that a λόγος consists of ὄνομα and ῥῆμα.³¹ At any rate, one look at Aristotle’s *Rhetoric* and *Poetics* is enough to see that he is not in these treatises concerned with terms of logic at all, and I cannot imagine that Theophrastus in a work on rhetoric would start his treatment of style with a discussion of terms of logic. After this part Simplicius goes on to mention distinctions already present in the *Poetics*, viz. standard words, metaphorical usage and πάθη. He skips a few items Aristotle mentions, like γλῶτται and κόσμος, terms no longer used in the sense Aristotle gives them, particularly κόσμος a term more at home in rhetoric. The first πάθη are similar to those of Aristotle’s *Poetics* (ἀποκοπή, ἀφαίρεσις), but the distinction of “simple, compound and decomposite words” is known only from

³⁰ It is a different matter whether these two parts of Ammonius’ text should be put together under 78 FHS&G. So little in them looks Theophrastus’ own thought.

³¹ Cp. Plut. *Quaest. Plat.* X on a similar subject.

later grammar.³² Now come the *ιδέαι*. Their examples (τὸ σαφές, τὸ μεγαλοπρεπές, etc.) are also found in Aristotle's *Rhetoric* (1414a18–29) as examples of qualities of style (ἀρεταί), though Aristotle has no need of such distinctions of virtues. Taking everything together I am inclined to the conclusion that Porphyry/Simplicius here uses a list mainly based on a reading of Aristotle's works on logic, rhetoric and poetics, with a few modern additions.

Comparison with the lists of Ammonius (65.2–12 and 65.31–66.6) and that of an unidentified group (Simpl. 9.20–22) shows a few differences. Ammonius and the anonymi use later terms such as παρασχηματισμός and do not exemplify πάθη by ἀποκοπή etc. In the text on the grammarian's tasks Ammonius does not speak of *ιδέαι* but gives a purely grammatical word, κλίσεις, whereas the anonymi have κυριότηας καὶ ιδέας. However, there is more. In the list of the rhetorician's tasks (65.31ff.) the occurrence of *ιδέαι* as qualities of style has its rightful place, for they are the effect of ἐκλογή and σύνθεσις. In the part on what grammarians do Ammonius does not mention them. Simplicius and the anonymi, however, do. But in their list the *ιδέαι* look like a *corpus alienum*. Now, at the end of his part on grammarians Ammonius mentions the five εἶδη τοῦ λόγου. Perhaps originally the anonymi and Porphyry also referred to “kinds of speech,” and Simplicius replaces εἶδη by *ιδέαι* in order to come closer to Aristotelian doctrine. Or *ιδέα* does not mean type of style, but just form. But this is pure speculation.

At any rate, when we connect the first part of Ammonius' annotation with the other part, in which Theophrastus is mentioned—as I am convinced we have to do—it may be legitimate to relate the Porphyry/Simplicius text with the second one in Ammonius. In both texts we have a reference to Theophrastus. As to the second one, Fortenbaugh and others have argued for its provenance from a logical work of Theophrastus, preferably that *On Affirmation and Denial*. My proposal is that we make περὶ τῶν τοῦ λόγου στοιχείων part of the same logical treatise, strike its title from the list of rhetorical works and renumber 683 FHS&G to 78B.

How much genuinely Theophrastean material is present in 683 is difficult to ascertain. Taken by itself, the list would not be surprising in a

³² The term ὑποσύνθετος seems to be known from Simplicius and Dexippus only (LSJ). The usual word is παρασύνθετος.

logical work by Theophrastus if he were trying to explain what Aristotle was discussing or were explaining his own method. But the list is of such a nature that items can easily be added or removed. Most scholars agree that in 78 FHS&G the end about the ἰδέαι, at least, is a later addition; some, like Fortenbaugh, are even more sceptical as to the Theophrastean content of this fragment. This scepticism increases if my proposal about the two Ammonius texts belonging together is accepted (see also n. 30). And the same scepticism may be applied to 683 FHS&G.³³

VII. ... and you have Περὶ λέξεως

Where does all this leave us with respect to the treatise Περὶ λέξεως? In the same position, I think, that Fortenbaugh leaves his readers in after his discussion of 78 FHS&G: 683 can no longer be used as a premise for inferences on the contents of Περὶ λέξεως. Theophrastus may well have discussed the subjects of this fragment in that work; but for a conclusion that he did so we should need other sources than 683 FHS&G.

To end, a few more words on Περὶ λέξεως. First, I do not think that a reference to this book is intended in 71G (Anon. Coisl.). The Anonymus offers several reasons why *De interpretatione* is a genuinely Aristotelian treatise, the last of which is that "works of the same name have been written by others in emulation of Aristotle, and traditionally included with them are the Περὶ λέξεως in place of the *Categories* etc." The title has been translated as *On Style*, but we know of the existence of a Περὶ λέξεως by Eudemus, and from the fragments of that treatise it becomes clear that this is a work of logic.³⁴ The Anonymus may be referring to Eudemus' work.

A second remark concerns the status of Περὶ λέξεως in the scholarly literature. The only ancient authors to mention its title are Diogenes and Dionysius. If Dionysius of Halicarnassus had not quoted from Περὶ λέξεως, scholars might well have thought that this title, like that of Eudemus, referred to a work of logic.³⁵ Nevertheless, scholars are

³³ Revealing in this aspect is Dexippus' list of items not coming under the categories (*In Cat.* 12.6–25).

³⁴ Pace the denial of F. Wehrli, *Eudemos von Rhodos* (Basel 1969) [*Schule des Aristoteles* VIII], on fr. 25–29.

³⁵ But we know of a Περὶ λέξεως by Ephoros (Theon, *Prog.* 71.22–25 Sp. = fr. 1 *Art. Scr.* Raderm.), in which he discusses rhythm.

unanimous in considering *Περὶ λέξεως* as Theophrastus' most important work on rhetoric.³⁶ Probably Usener's view that *Περὶ λέξεως* consisted of four books, and Rabe's exclamation that if Dionysius quotes from this book something about the style of Lysias, then how much more must Theophrastus have had to say in it on Isocrates and Gorgias, have set the trend. Stroux is ambiguous: his citations of *περὶ λέξεως* (always without a capital) might refer to the work, but often could equally well have regard just to Theophrastus' theory on *λέξις*.³⁷

Finally, what is the meaning of the title *Περὶ λέξεως*? A popular translation is "On Style," the same translation which is used for Demetrius' *Περὶ ῥημηνείας*. It may well be that this translation is too specific; in any case it does not explain how Eudemus could use the same title for a work of logic. A more accurate, though cumbersome translation would be "On how to say something." I propose "On expression" as a shorthand for "How to express thoughts." Such a translation leaves room for the application of this title to a work of logic.

So do the new fragments add up to a new whole? As to the subjects of Theophrastus' rhetoric and poetics I cannot give a positive answer, but this is because Doreen Innes already discussed Theophrastus' achievements in the field of rhetoric a few years ago;³⁸ after Fortenbaugh deprived us of 78 FHS&G I have little to add to her discussion. And the fragments dealing with poetics are too meager to allow for a coherent reconstruction of Theophrastus' theory in this field.³⁹ Nevertheless, coming after Mayer's idiosyncratic edition of the fragments of *Περὶ λέξεως*,⁴⁰ the edition in the new *Sources* is a major step forward.⁴¹

³⁶ E.g. Regenbogen 1940, 1527: "Die wichtigste unter den rhetorischen Schriften T.' mit der weitesten Nachwirkung," und. G. A. Kennedy, *The Art of Persuasion in Greece* (Princeton 1963) 273: "Of his lost rhetorical works we know best the treatise *On style* because Cicero made repeated use of it" (but Cicero does not say so), etc. etc.

³⁷ Usener 1858, 9; Rabe 1890, 5; Stroux 1912, *passim*.

³⁸ Innes 1985.

³⁹ Most recent discussion in S. Koster, *Antike Epötheorien* (Wiesbaden 1970) 85–92 and R. Janko, *Aristotle on Comedy* (London 1984), general index s.v. Theophrastus.

⁴⁰ Mayer 1910.

⁴¹ I thank Jean-Louis Labarrière, who when unable to attend the conference sent me his comments afterwards. They made me reformulate my thoughts on several points. Dr A. F. Harms kindly corrected my English.

5

Theophrastus in the Tradition of Greek Casuistry

Trevor Saunders

This topic needs to be considered in a broad context; and I start by riding a hobby-horse. In the study of Greek culture as a whole, law (effectively Athenian law, since very little is known of the laws of other states) has always been something of a Cinderella. The reason is not far to seek: it is the sheer range and complexity of the sources. Chief among them is a huge and dauntingly intricate body of forensic and other kinds of speeches, some wearisomely long, and all partisan, tendentious, and tricky to interpret. Hence it is difficult to assemble a complete and systematic description of substantive laws; and it is even more difficult to assess the legal and other principles that underlay them, and the legitimacy and comparative power of the arguments deployed by orators, and accepted by juries, in administering them. That is to say, we do not yet have a full account of Athenian *jurisprudence*.

Now in speaking of jurisprudence in connection with Athenian law I am aware that I am tiptoeing, or perhaps blundering, on to hazardous ground. The objection I sometimes meet is that the Athenians had no body of persons who discharged functions analogous to those of the Roman *jurisprudentes*—not even the speech-writers, or rather espe-

cially *not* them, given their *parti pris*—and that therefore talk of “Athenian jurisprudence” is misleading. But the term is perfectly legitimate. Athenian jurisprudence is utterly *sui generis*: there is no need whatever to treat Roman concepts and practice as definitive. The Athenians had their own legal experts: themselves. For as the foundation of their extensive and complicated legal code they adopted, consciously and unconsciously, implicitly or explicitly, a great many assumptions and principles of all kinds—moral and religious, economic and political, as well as purely legal. We need a comprehensive study of those principles and their interrelations, in effect of Athenian jurisprudence. The task is both vital and vast.¹

One consequence of the neglect of the Athenians’ jurisprudence is that their casuistry also, both in legal and non-legal contexts, has not (so far as I know) been comprehensively described and analysed. So when I set out to discuss Theophrastus in the “tradition” of Greek casuistry (not merely *Athenian* jurisprudence) I suffer from the handicap of not knowing what that tradition is, at any rate in fine detail. But the following generalisations will I think be acceptable at a working level, and will serve to make what Theophrastus is doing intelligible.

Casuistry I wish to define as the discovery and application of good or at any rate broadly acceptable reasons and methods for resolving conflict between two laws or rules, or principled and strongly felt religious, moral, or social imperatives. It is rather more than what it is commonly taken to be, the accommodating of laws etc. to special circumstances, in which the strict principle or letter of the law would lead to anomaly or hardship. For principles do not directly conflict with circumstances and facts, only with other principles, namely those which particular circumstances can be represented to embody or to be instances of.

Casuistry seeks to find *principled* ways of resolving conflicts of *principle*, by confirming, challenging, refining or replacing one or indeed both of the competing principles, in such a way as to leave normal sentiment perhaps disquieted (note Diodotus’ caution in the Mytilenean debate, Thuc. 3.48.1), but at any rate not wildly discontented or outraged. I am not concerned with casuistry in the bad or “Jesuitical” sense of convoluted reasoning which, however logical, violates common moral perception. Nor am I concerned with mere compromise, which although a principle in a sense, is mechanical and too broad: it can apply

¹ Cf. Saunders 1991a, 115–16.

to any circumstances, without reflection on the comparative merits of the competing principles.

Of casuistry as I have defined it there are in ancient Greece two species. One *mutes* or *blunts* the conflict of principles, and is called *epieikeia*, commonly translated 'equity', the calculation of the decent thing to do. The other *sharpens* the conflicts; it has no specific name that I can discover. Nor is there a generic term to cover both. But both are clearly identified and discussed by Aristotle.²

The first type is omnipresent in Athenian courts, and indeed in all less formal contexts, such as the household. The essential shape of the conflict of principle in the courts is as follows. The law forbids a certain act, and *either* lays down a fixed penalty for infraction (*agones atimêtoi*, "contests in which no estimation [of penalty] is required"), or allows the jury to choose between the penalty demanded by the prosecution and the lighter one suggested by the defence (*agones timêtoi*, "contests requiring an estimation of penalty"). Defendants urged a whole battery of reasons (e.g. lack of intent, ignorance, *force majeure*, their good moral record) why no penalty should apply, or only a mild one.³ Juries had to balance the competing principles of equity and the law; their verdicts were an approximate but direct expression of moral sentiment at that time (with of course liberal lashings of personal and social prejudice). The crucial point is that in these procedures no law is *broken*: the legal system not only allows but requires these *ad hoc* mutings of its provisions; otherwise, there would have been unsustainable inflexibility and severity in its application.⁴ Sometimes, indeed, the law itself already incorporated equity in its own provisions; e.g. regulations for *involuntary* homicide, presumably a common plea and apparently entailing an abated penalty, occurs as early as the code of Draco (621/620 B.C.).⁵

² Equity: *EN* 5.10, 6.11 *init.*, *Rhet.* 1.13, esp. 1374a25ff., cf. 1416a4ff. and scattered remarks in *Pol.* 3.11 *fin.*, 15 and 16. The anonymous kind: *EN* 9.2, *EE* 7.11 (called however *ethikai protaseis* at *Topics* 105b20–21).

³ I have given some account of these pleas in my 1991b, 104–18. In *agones timetoi*, after a verdict of "guilty," a complete supplementary hearing, at which arguments of equity were presumably deployed at some length, was devoted to the "estimation" of the penalty (cf. *ibid.* 95 n. 26, 101).

⁴ Cf. Aristotle *EN* 1137b13, 28; 1143a19–24; *Pol.* 1282a4ff. Arbitration as a special locus of equity: *Rhet.* 1374b19–22. Equity recognised in juror's oath: 1375a27–31, *Pol.* 1287a23ff.; Demosthenes 20.118, 23.96, 39.40.

⁵ Hölkeskamp (1992) has suggested that the laws attributed to the early Greek lawgivers are not fragments of complete and once-for-all systematic codes, but highly

Of the other kind of conflict of rules Aristotle gives several examples in *EN* 9.2 (1164b22 ff.).

Ought one to	or	ought one to
1. Obey father always		when ill, obey a doctor?
2. Obey father always		when electing a general, vote for candidate militarily qualified?
3. do service to friend		to a good man?
4. repay benefactor		give to close friend (<i>hetairoi</i>)?
5. <i>ransom</i> one's ransomer		ransom one's father?
6. <i>repay</i> one's ransomer		ransom one's father?
7. give a loan to a scoundrel in return for an earlier loan from him		refuse?

These dilemmas are presented disjunctively: it is assumed in all cases, and explicitly stated for 3 and 4, that one cannot adopt *both* alternatives. Nor, presumably, may one do nothing (except in 7, where that is in effect one of the options).

Aristotle suggests various ground rules for resolving the dilemmas:

- A. No one person is entitled to deference in all things.
- B. Returning a service (e.g. a loan) takes priority over favours to close friends,
- C. but not when the alternative to returning a service/debt is to benefit one's *father* (cases 5 and 6);
- D. and when returning a service entails satisfying an *unfair* claim—i.e. when a loan is proposed to be made to a scoundrel, which is a *greater risk* than one made to a good man—one may refuse (case 7).
- E. One should consider the status of the persons with the competing claims: each should receive his 'honour' (*timê*, 1165a24, 28) and his 'due' (*oikeion*, 1165a18, 32). It is strongly implied, though not quite stated explicitly, that the due or honour of a father would take priority over

detailed, *ad hoc* adjustments to cope with points of difficulty in normal practice. It would be interesting to see what considerations of equity may be inferred to underlie them, if any.

that of (say) a brother, a relative's over a non-relative's, an elder's over a younger's, *et sim.*

- F. Somewhat obscurely, since we are not told (A–E apart) how they are to be deployed, considerations of differences in size (*megethos*: 'importance'?), of smallness (*mikrotês*: 'triviality'?), 'fineness' (*to kalon*), pressure (*to anankaion*: 'urgency', 'necessity'?), kinship (*oikeiotês*, 'intimacy'?), virtue (*aretê*), and utility (*chrêsis*), may influence the choices between alternatives.

It is to the elaboration of E that Aristotle devotes most attention: his chief criteria seem to be familial, social, and hierarchical (cf. *EN* 1159b36–1160a8). He concludes the chapter by remarking that the comparison, *sunkrisis*, is easier when it is between things/persons that are of the same kind (*homogenê*) and more troublesome when they are different (*diapheronta*). At the point where the problems become interesting and difficult, Aristotle gives up: he makes no attempt to establish a principled commensurability between competing claims (contrast *EN* 1133b19ff., 1164a1–2, and cf. n. 16).

Unlike the decisions of the courts of law, which were based on equity and involved *modification* of one or both of the competing claims, the decisions described by Aristotle are straight stark choices between alternatives: after due deliberation, one simply chooses either a or b and that is that. We are indeed given lists of factors that can make the choice difficult, but only limited guidance about priorities in the assessment of those factors. At any rate, even after the assessment, we are still left with either/or. Nevertheless, Aristotle's insistence on either/or is up to a point not unrealistic: for ineluctable choice is typical of many moral decisions one faces. Ought one to tell a secret, or not? One cannot both tell and not tell. Are you entitled to sell at a high price, when you are aware, for reasons known to you but not to your buyer, that the price will certainly drop tomorrow (cf. Cicero, *De Off.* 3.50–53)? You cannot both reveal your knowledge and not reveal it. Nor, often enough, can you evade the dilemma by inaction; for inaction is itself one of the alternatives that confront you.

In outline, then, that seems to me to be the casuistical tradition as Theophrastus would have known it. What had he to say on the topic? The evidence is: (i) three fragments (628–30 FHS&G), which may or may not embody information on his view of equity; (ii) the third chapter of Book I of Aulus Gellius (534 FHS&G), which reports Theophrastus' discussion of the anonymous type of casuistry, in connection with

friendship; (iii) 614 FHS&G, in which Aristides is reported to have balanced the just and the advantageous; (iv) 650 FHS&G, a long and complex discussion of the law of sale, one part of which apparently seeks out antecedent circumstances which might invalidate a sale,⁶ and another part very briefly canvasses possible penalties for breaking a contract (see below *ad fin.*). And that is all. Despite the fact that only a small proportion of Theophrastus' work has survived, it is perhaps surprising, in such a wide-ranging and prolific author, that we know of no work or even continuous passage explicitly devoted to *epieikeia*. If his work in two books *On Punishment* (*Peri Timorias*) survived, we should probably be better informed.

At first sight, however, 628–30 do tell us a little. The events occurring in 629 “contrary to calculation,”⁷ and those in 630 which occur “once or twice,”⁸ may imply a need for casuistry, but that is not certain; for all that is said is that rare and unexpected events are not covered by the laws. We are not told whether these events are *circumstances* which affect the commission of offences, and which may call for equity, or whether they are actual offences, in which case all we may have is a realistic observation that there are some offences which laws inevitably do not cover, and which therefore cannot be prosecuted (compare the maxim *de minimis non curat lex*). But if equity is implied, these two fragments are rather misleading; for they suggest that equity is exceptional. But as is obvious from the Attic orators, it can and does enter into the pleading in practically any case. What one should say is: “there are a whole host of things the law cannot cover, *each of which* occurs rarely and unexpectedly.” The fragments make equity sound a minor matter; but it is not. And there is perhaps a curiosity in the use of *parabainein* in 630, which commonly but not always means ‘transgress’. Why did Theophrastus not use *paraleipein*, *vel sim.*? Is the notion of legislators transgressing a gentle leg-pull? Or perhaps we ought to translate: “*as for* what happens once or twice, legislators transgress,” i.e. they override their own laws, or allow them to be overridden, *ad hoc*.

⁶ Discussed by Fortenbaugh 1993, 452ff.

⁷ *Digesta* 1.3.3: iura constitui oportet, ut dixit Theophrastus, in his quae ἐπὶ τὸ πλεῖστον accidunt, non quae ἐκ παραλόγου.

⁸ *Digesta* 1.3.6: τὸ γὰρ ἅπαξ ἢ δις, ut ait Theophrastus, παραβαίνουσιν οἱ νομοθέται.

628 is far more interesting.⁹ The second sentence does seem to imply some sort of lack of fit between laws and the circumstances for which they are made, and that could indicate that Theophrastus has in mind the exercise of casuistry by the “good men.” But what *kind* of casuistry? “Laws” may suggest the courts and the exercise of equity in trials. Fortenbaugh,¹⁰ however, sees a sharper conflict, between law and action by good men “contrary” to it, i.e. an “exception” or “violation.” He interprets: “‘Good men’ are marked by a disposition to choose the mean relative to themselves” (cf. 449A 5–6 for Theophrastus’ following of Aristotle on the mean). “They do not need law, because they assess particular situations correctly and respond appropriately. Moreover, the fact that laws are made in response to circumstances and not vice versa, forces the “good man” to depend on his own judgment. If a legislator could determine (control) circumstances, he could write rules that admit no exceptions. But he does not control the course of events, and in writing laws in response to a particular set of circumstances he will almost certainly overlook other conditions that may be present in the future and justify an exception to the law.”

I would be more convinced by this interpretation if Theophrastus, instead of *agathoi*, had said *phronimoi*, which is the *mot juste* for contexts requiring practical insight and judgement of the mean (cf. 449A *fin.*), and if we had some explicit statement about exceptions or violations. If Theophrastus means to indicate casuistry of some kind, he has expressed himself enigmatically, in a manner more characteristic of Heraclitus.

Diffidently, I hazard another line of interpretation. If you were to find in isolation the remark, “good men need few laws,” what would you naturally think it means? Surely that good men need few laws *to keep them in order*. Good men are good, and act virtuously, whether or not there are laws; they do so of their own accord, without the constraint of prospective penalty. Laws are imperfect things; in order to be effective at all, they have to reflect the standards and conduct of ordinary and morally fallible men—what the fragment calls *ta pragmata*, ‘prevailing circumstances’, ‘the facts of life’, or perhaps ‘what men in general do’. But the converse is *not* true: these standards or actions do not respond to

⁹ Stobaeus, *Anth.* 3.37.20: ὀλίγων οἱ ἀγαθοὶ νόμων δέονται· οὐ γὰρ τὰ πράγματα πρὸς τοὺς νόμους, ἀλλ’ οἱ νόμοι πρὸς τὰ πράγματα τίθενται.

¹⁰ 1993, 447–49, cf. 451.

laws; they have their own momentum. Compromise with vice, and imperfect effectiveness in practice, are fundamental to law. The good man therefore largely stands aside from the legal apparatus: for he is superior to it and does not need it, or not much. It is virtue, a different standard of conduct altogether, that keeps him on the paths of righteousness.¹¹

I am therefore far from convinced that any one of this trinity of fragments has any reference to casuistry, though I can of course see their “capabilities.”

534, however, certainly does discuss casuistry. This is Aulus Gellius 1.3, which opens with the case of Chilo of Sparta, one of the seven sages. A friend of his was being tried on a capital charge, and was in fact guilty. Chilo was himself one of the three judges, and he debated with himself whether to obey the law (as he is said to have enjoined in one of his own “sayings”!) and vote for condemnation, or to obey the claims of friendship and vote for acquittal. In the end he wriggled off the hook: he himself voted for condemnation, thus observing the law, but he persuaded the other two judges to acquit. Whether he had acted rightly, *recte*, was a question that troubled him till the end of his life, which he had in all other respects led with a blameless conscience. Theophrastus’ views on helping friends in violation of the law are then given by Gellius, partly in direct quotation of the Greek, and partly in Latin translation and/or paraphrase;¹² a brief extract from Favorinus is thrown in too. I believe 534 has been under-interpreted and misunderstood; and since I wish to make large claims for it I must prepare the ground rather carefully, in two respects.

A. In section 12 Gellius reproaches Cicero for not having pursued with sufficient fullness the thoughtful and clear account of Theophrastus (*pensiculate atque enucleate scripta*, cf. *diligentissime* 10), which was marked by *anxietas et quasi morositas disputationis*,

¹¹ Cf. Epicurus 530 Us. (Fr. 81 Bailey, cf. 83; Arrighetti² 209): “the laws are laid down for the sake of the wise, not in order that they may not commit injustice, but in order that they may not suffer it”; also Xenocrates 530 Heinze (I am grateful to André Laks for these references). That Theophrastus has some such thought in mind is also strongly suggested by two passages in Plato’s *Laws*, one of which (875C) has verbal similarities to 628 FHS&G, and the other (853) deplores the necessity to compose laws at all, in view of the depravity of men; compare also Aristotle *Pol.* 1264a30 on Plato *Rep.* 425DE, and Philemon 2 KA Menander 295 Koerte also links *nomoi* and *pragmata*, but to uncertain purport. (I owe this reference to Geoffrey Arnott).

¹² On the likely essential accuracy of Gellius’ Latin rendering, see Fortenbaugh 1984, 289; 1990, 461–62; and 1993, 451 n. 14.

words which suggest not just care but almost obsessive care, not only scrupulousness but scrupulosity or pedantry. So too do the words *caute et sollicitè et religiose* in 29, where Theophrastus' concern with analysis and debate is stressed; for evidently he did not go into individual cases, *singula*, but confined himself to general theory (cf. *non de unoquoque facto singillatim ... neque certis exemplorum documentis*, 22). Nevertheless, he did apparently discuss one particular case, that of helping a friend contrary to law (23–25); for after all, this situation falls firmly within the subject-matter of his work in question, *On Friendship*. Gellius' point seems to be that Theophrastus dealt with that friendship-dilemma not by comparing it with several other particular dilemmas, which given their great range and complexity would have been only confusing, but by reference to general theory about the solving of moral dilemmas of all kinds. That is to say, he attempted to show that the solution to the friendship-dilemma is consistent with, and derives from, a wider and more general analysis of dilemmas and modes of procedure for dealing with them. This shape of Theophrastus' discussion is reflected in Gellius' report of it: about half of the material is indeed an analysis of the friendship-dilemma (23–25), but about half is entirely general (*set ... utitur*, 22; 26 and 28). This latter material is indeed brought to bear upon that dilemma (*super ea re*, line 59), but the elaborate Greek of 26 suggests some more widely applicable analysis; so too do the ponderous rotundities of 28; and the words *generibus rerum summam universimque* (lines 42–43) sound like a *compendious* treatment of many different types of situation.

B. In sections 23–25 the fundamental polarities are *honestas/honestum* and *utilitas/utile*. It seems to me that *honestas* does not mean what translators sometimes print: honour,¹³ at least if that means simply and only good standing in the eyes of others. In Theophrastus I assume Gellius found *to kalon* and *to sumpheron*, or *chrêsis/chrêsimon*; and he is using the language of Cicero's philosophical works, especially of the third book of the *de Officiis*, the book devoted to casuistry. *Utile* is 'expedient', *honestum* is 'moral', *the right thing to do*, the thing done by a person of moral excellence or integrity, i.e. a person of *honestas*,¹⁴ which is ideally the determinant of his *honestas* in the other sense, his

¹³ E.g. Griffin and Atkins 1991, xlv–xlv.

¹⁴ For the division of *honestum* into the 4 virtues, see *De Off.* 1.15–18; cf. 3.35 *recta*.

reputation or honour. Hence in line 44 *turpitudine*, 'disgrace', means or implies moral baseness, which ideally leads to *infamia*. In line 50, *honestas meae famae* is not the near-tautology it may seem, "honour of my good reputation," but "good moral standards and conduct which constitute part of my *fama*, i.e. of my good reputation."¹⁵ Outside Gellius' report of Theophrastus, in the preamble, we have *delinquendum*, doing *wrong*. In 3, not printed in FHS&G, we hear that Chilo was assailed by his conscience: had he acted rightly, *recte*? Nothing direct is said about his reputation. In 9, "many other" philosophers treated the problem under consideration as one of justice, i.e. as a moral issue. All this suggests that Gellius, at least, understood the basic conflict to be between utility and morality.

I now attempt to analyse the crucial sections, 22–28. My starting point is that Theophrastus has definite ideas about what ought *not* to be done. We should not be moved, he is reported to say (24), by names or terms, *nominibus*; and the decision between *honestas meae famae* and *rei amici utilitas* should not be made *vocabulorum appellationibus* and *dignitatibus generum*. What are these *genera* to which we are not allowed to appeal? Presumably *honestas* and *utilitas* themselves; for these are concepts or grounds that are different in kind, *genus*; and each has its own title (*appellatio*) and grandeur (*dignitas*). The point is that neither title nor grandeur in itself confers an automatic priority on either criterion over the other. For moral dilemmas are *conflicts* between *honestum* and *utile*, and these are the terms in which they should be generalised and analysed. The problem, then, is essentially one of commensurability, of finding some common and universally applicable measure by which *honestum* and *utile*, different in kind though they are, may be assessed on a common scale.

Consequently, Theophrastus does not give us, as Aristotle did, (i) a mere checklist of persons, with superior and inferior claims to priority, (ii) a mere string of other factors which could complicate the relative strengths of those claims, and hence the choice between them. He both sharpens and generalises (i) into *honestum*, and (ii) into *utile* (but note *utile* embryonically in *EN* 9.2 *fin.*: *chrêsis*, 'usefulness'). He attempts,

¹⁵ *Fama* occurs in line 48 also. The mentions of reputation in paragraphs 23 and 24 suggest to me that Theophrastus was not discussing Chilo's case in particular, at least in that report; for would not Chilo have kept his action to himself? Cf. Fortenbaugh 1993, 450 n. 12.

as Aristotle did not,¹⁶ to provide a *model* for the commensurability of *honestum* and *utile*. The model is of weighing: note *repeditur*, *compensatur* (23), *ponderibus* (24), *praeponderat* and *pondus* (25), and *rhope* (26). The crucial point is in 26. Where we have (say) an ounce of gold and an ounce of bronze, the gold will be more valuable, *timiôteron*; but that value can be equalled or exceeded by some agreed greater weight of bronze. “Value” is the common measure. The shift from literal weight to decisive influence is expressed by the ambiguous *rhôpê* (line 64).

So in simple dilemmas, when *utilitas* or *honestas* are embodied in “things which are equal or not far different,” i.e. when the practical scope or effect of the one is equal or nearly equal to that of the other (if that is what the cloudy language of lines 53–55 means), then *honestas* takes priority, and the dilemmas are resolved by simple reference to the *parvitates rerum et magnitudines atque ... officiorum aestimationes* (28). That is to say, when the “amounts” (*parvitates*, *magnitudines*) of the “things” in which *honestum* and *utile* take effect seem equal, then ordinary “right” priorities can prevail: e.g. *aestimationes officiorum*, estimates of moral duties, allow father to prevail over son, relative over non-relative, etc. In lines 55–58, however, the “thing” or affair or situation in which a small sacrifice of *honestum* takes place is unimportant, and is presumably *not* “equal” to the circumstances in which a great advantage for a friend is to be won. Thus, although *honestum* is in general more valuable than *utile*, *utile* is more valuable than *honestum* in this special case, and shows one the course of action to follow. So too conversely, when only small advantage is to be won by jettisoning much *honestum*. Sometimes both the “amounts” and the simple *officiorum aestimationes* are affected by a variety of extraneous circumstances, sometimes not, as 28 says. I take the point of *potestatibus praesentibus* (24) to be that the present, here and now, relative values of *honestum* and *utile* are what should be decisive; we must not assume that the one or the other automatically and always outweighs the other.

One advantage of the model of weight/value is that there can be more or less of *utile* and more or less of *honestum*, on a sliding scale in each case. Hence one can say that when *utile* is preferred to *honestum*, the latter is still “there.” In the example Theophrastus gives, it has merely

¹⁶ See EN 1155b15–16 with PA 644b18–19 for commensurability between things that differ *eidei*, but not between those that differ *genêi*.

suffered some small diminution; the extent to which it has been passed over is *graduated*. In *EN* 9.2, however, the good man who is passed over in favour of a friend is passed over *tout court*; at least, that is how the outcome is presented by Aristotle.

Nevertheless, the attempt to establish a universal commensurability is too simple, even crude. Section 26 distinguishes between amount/weight and value: a small piece of gold may be as valuable as a large lump of bronze; there is some third thing (coined money, say) in terms of which both may be expressed. But in moral values, what could such a *tertium quid* be? All we can say is that *x* value of *utile* can equal or exceed *y* value of *honestum*, as if they were alike in kind and could be measured on a *common scale* of value. The model of value seems to assume the commensurability it is designed to establish. And *in re non gravi* in line 56, however one takes it, is self-defeating. It can hardly refer to the capital charge itself, which is obviously not *non gravis*; indeed, the whole argument depends on the assumption that it is *serious*, as only then can the *utile* of escaping it be large (*magna utilitas*, 45). If on the other hand *in re non gravi* means the voting of Chilo (or whoever) and his persuasion of his fellow-judges, then since this manoeuvre led to the acquittal of a capitally guilty person, how can we say it was a *non gravis res*? Surely it is a *major* stain on Chilo's *honestas*, his moral standards, and so on his *fama*—not a slight one as line 44 claims. That renders implausible the attempt of lines 45–47 to put both actions wide apart on the same scale, namely of morality, by arguing that a small loss of morality (*sc.* in breaking the law) is compensated by the larger morality of helping the friend to escape a penalty as heavy as death.

I wonder how far, if at all, Theophrastus when working on the solution of moral dilemmas had in mind the calculations of equity common in the courts. Moral dilemmas are not criminal or penal matters, of course; but characteristic of both contexts is an attempt to put two considerations or claims together and to express the weight of one in terms of the value of the other, on some common system of measurement. In a court, when a *substantial* penalty is due, the jury receives representations from the defence to the effect that this or that factor (e.g., the offender's lack of intent, or his services to the state) is *substantial* enough to merit abatement of the penalty. The analysis offered is often in terms of desert; and the essential notion, which is found in various formulations throughout the orators, is of reciprocity. It is well expressed by Dinarchus by the rare word *antikatallesthai*, 'offsetting', or 'recipro-

cal exchange or compensation'.¹⁷ The calculation is rough and ready, but no more so than Theophrastus' resort to 'weighing'. He too, in line 63, uses in his model a *recherché* word: *antiparaballomenon*, as a means of arriving at comparative value, *time*. Both he and Dinarchus are groping for some technical way of expressing commensurability. A legal origin for the analysis in 534 seems to me more than possible. Perhaps Theophrastus is also aware of Hippodamus' and Plato's criticisms of the ultimate necessity to *choose* between the proposals of the prosecution and defence.¹⁸

That Theophrastus took at least some interest in the fairness of the penalties to be prescribed by law, as distinct from their abatement by equity in particular circumstances, is shown by lines 46ff. of 650,¹⁹ where he debates what penalty is proper when a buyer or a seller refuses to go through with an agreed sale. Is the latter to be fined the price he would have received? Or is that *zêmia* 'unequal', *anisos*, i.e. not commensurable with the offence, unfair, disproportionate? There is an obvious similarity to the calculations performed by way of equity.

I conclude that Theophrastus, as he is reported in 534 FHS&G, is attempting to make Aristotle's analysis of moral dilemmas more precise and more useful, by enlarging and refining its conceptual basis. The enterprise adds something, but not a great deal, to Theophrastus' stature as a philosopher. Nevertheless the stance he adopts is creditably independent:

A. He is both like and unlike Aristotle. Aristotle was not prepared to give his list of personal and social duties an automatic priority in all cases: he was perfectly prepared to play off a whole host of particular circumstances against it; and he expressed the result of the playing-off disjunctively. Theophrastus, generalising the circumstances into *utile*, and the duty-list into *honestum*, was similarly not prepared to give *honestum* an automatic priority; but he sought more nuanced calculations, namely of commensurability, perhaps taking his inspiration from equity as practised in the courts; and these calculations allow for the possibility of avoiding crude disjunction in expressing outcomes.

B. He is both like and unlike the Stoics. Like them,²⁰ he analysed the

¹⁷ See *Phil.* 17; cf. Saunders 1991b, 106–18, esp. 113ff. and n. 158.

¹⁸ Aristotle *Pol.* 2.8, Saunders 1991b, 101, 193 n. 188.

¹⁹ Full commentary in Szegedy-Maszak 1981.

²⁰ Diogenes of Babylon, Antipater of Tarsus, Panaetius, Hecato of Rhodes (*De Off.* 3.7, 51–56, 63, 89–92).

problem in terms of *honestum* and *utile* (was he their inspiration for the dichotomy?); but unlike them, he was prepared to ‘play off’ the one against the other, whereas the Stoics maintained that in the end the two terms are identical. That is very clear from Cicero’s *De Officiis* 3. Cicero consistently supports, with much righteous indignation, the claims of *honestas* against *utilitas*; but then, when the claims of *utilitas* become unanswerably pressing, hurries to re-baptise it in the name of *honestas*. One must not kill; but it is *honestum* to kill a tyrant (32). When the social good requires it, *utile* becomes *honestum*; in that sense, there is no conflict between them (cf. 11, 20, 35, 75, 83 *fin.*, 110; cf. *De Leg.* 33, on Socrates); if there appears to be a conflict, it is illusory. This is straight Stoicism;²¹ it is not Peripatetic.²²

My conclusion, then, is that by squeezing maximum juice out of 534, we can tell an *eikos muthos*. Whether it is an accurate one, *allos logos*.*

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²¹ In *De Am.* 61, however, reported by Gellius (13), Cicero takes a much more Theophrastean line than he does in *De Off.* 3.43–44, for he allows *venia* for slight departures from the (right) path.

²² *De Off.* 3.20, cf. 106; cf. *Tusc.* 5.5.

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6

Theophrastus on the Nature of Music (716 FHS&G)¹

C.M.J. Sicking

I. Text, Translation

Porphyrus, In Claudii Ptolemaei Harmonica 1.3 (p. 61.16–65.15 Düring)

νῦν δ' ἴσως μὲν καὶ ἄλλοι πλείους συμφέρονταί μοι, οὓς ἀπορία τῶν συγγραμμάτων οὐκ ἔχω καταλέγειν ἐπ' ὀνόματος, ἀντὶ πάντων δέ μοι ἀρκέσει Θεόφραστος διὰ πλειόνων καὶ ἰσχυρῶν, ὥς γ' ἐμαυτὸν πεῖθω, τοῦ δόγματος δείξας τὴν ἀτοπίαν ἐν τῷ δευτέρῳ Περὶ μουσικῆς, οὗ τὴν λέξιν ἀναγραπτέον καὶ ἀξιοτέον τοὺς ὑπὲρ τοῦ Πτολεμαίου ἰσταμένους εὐθύνειν τὰ λεγόμενα ἔχοντα οὕτως·

- ¹ 1. ἔστι γὰρ τὸ γινόμενον κίνημα μελωδητικὸν περὶ τὴν ψυχὴν σφόδρα ἀκριβές· ὁπόταν φωνῇ ἐθελήσῃ ἐρμηνεύειν αὐτό, τρέπει μὲν τήνδε, τρέπει δ', ἐφ' ὅσον οἶα τ' ἐστὶ τὴν ἄλογον τρέψαι, καθ' ὃ ἐθέλει.

¹ My thanks are due to Marlein van Raalte, and to the Leiden students and research assistants (especially Michel Buijs, Mieke Koenen and Ilja Pfeijffer) who during 1992–1993 participated in a “privatissimum,” where we discussed this in many ways baffling piece of polemical writing.

ἥς τὴν ἀκρίβειάν τινες ἐπεβάλλοντο εἰς τοὺς ἀριθμοὺς ἀναπέμπειν, κατὰ
 5 τοὺς ἐν τούτοις λόγους τὴν ἀκρίβειαν τῶν διαστημάτων γίνεσθαι
 φήσαντες. ἓνα γὰρ λόγον εἶναι τοῦ διὰ πασῶν ἔφασαν ὥς καὶ τὸν τοῦ
 διπλασίου, καὶ τὸν τοῦ διὰ πέντε ὥς τὸν τοῦ ἡμιολίου, καὶ τὸν τοῦ
 διὰ τεσσάρων ὥς τὸν τοῦ ἐπιτρίτου, καὶ τῶν ἄλλων δὲ διαστημάτων
 10 ἀπάντων ὁμοίως ὥσπερ καὶ τῶν ἄλλων ἀριθμῶν ἐκάστου ἴδιον· οὕτω τ'

2. ἂ δὲ λέγοντες συνετώτεροί τισιν ἐφαίνοντο τῶν ἀρμονικῶν καὶ
 αἰσθῆσει κρινόντων τοῖς τῶν νοητῶν ἀριθμῶν λόγοις ἐπικρίνοντες. οἱ
 οὐκ ᾔδουσαν ὅτι, εἰ μέντοι ποσότης ἐστὶν ἡ διαφορά, γίνεται αὕτη παρὰ
 τὸ ποσότητι διάφορον [κἂν μέλος ἢ μέλους μέρος εἴη].² ὥστε καὶ ἡ
 15 (χρόα, εἰ)³ χρόα χρόας ποσότητι διαφέρει,⁴ ὅπερ ἀνάγκη, κἂν μέλος ἢ
 μέλους (μέρος)⁵ εἴη, εἰ⁶ γε τὸ μέλος καὶ τὸ διάστημα ἀριθμὸς καὶ διὰ
 τὸν ἀριθμὸν τὸ μέλος καὶ ἡ τοῦδε διαφορά. καὶ γὰρ εἰ πᾶν διάστημα
 πληθὸς τι, τὸ δὲ μέλος ἐκ διαφορῶν φθόγγων, τὸ μέλος ὅτι ἀριθμὸς
 20 τοιόνδε ἂν εἴη. ἀλλ' εἰ μὴδὲν ἄλλο (ἢ)⁷ ἀριθμὸς, πᾶν ἀριθμητὸν μετέχει
 ἂν καὶ μέλους ὅσον καὶ ἀριθμοῦ.

3. εἰ⁸ δ' ὥς τῷ χρώματι συμβέβηκοι⁹ τὸ πληθὸς ἄλλῳ ὄντι, καὶ τοῖς
 φθόγγοις ἔστι τι ἄλλο φθόγγος καὶ ἄλλο τὸ περὶ αὐτὸν πληθὸς. ἀλλ'
 εἰ ἄλλο τι φθόγγος ἢ ἀκουστός,¹⁰ καὶ ὁ βαρύτερος καὶ ὁ ὀξύτερος
 25 διαφέρουσιν ἀλλήλων ἢ ὥς φθόγγοι ἢ ὥς τῷ πλήθει. εἰ μὲν τῷ πλήθει,
 καὶ ἔστιν ὁ ὀξύτερος τοιοῦτος τῷ πλείονας ἀριθμοὺς κεκινήσθαι καὶ ὁ
 βαρύτερος τῷ ἐλάττω, τί ἄλλο τὸ ἴδιον τῆς φωνῆς ἂν εἴη; πᾶσα γὰρ
 ἀντιληπτική ἢ κατὰ τὸ ὀξύ ἢ κατὰ τὸ βαρὺ ἐστὶ· πᾶσα γὰρ φωνὴ ἐστὶν
 ἥς μὲν ὀξύτερα, ἥς δὲ βαρύτερα, ὥστε ἥς μὲν ἔλαττον τὸ πληθὸς, ἥς δὲ
 30 πλεῖον, ὥστε ἀριθμὸς. οὐ αἰρομένου τί τὸ ἀπολειπόμενον εἴη ἄλλο τι
 καθ' ὃ φωνή; ἢ φωνὴ δ' εἰ¹¹ ὀξύτερα τινὸς ἢ βαρύτερα ἐστίν, ἔχει τὸ
 ποσὸν ἢ φωνή· εἰ δ' ἄλλο τι, οὐκ ἔτι ἔσται φωνή τις.

4. εἰ δ' ἢ φθόγγοι διοίσουσιν ἀλλήλων οἱ ὀξεῖς καὶ βαρεῖς, οὐκέτι τοῦ
 πληθους δεησόμεθα. ἢ γὰρ αὐτῶν φύσει διαφορὰ αὐτάρκης ἔσται εἰς τὴν
 τῶν μελῶν γένεσιν, καὶ εἰδησις ἔσται τῶν διαφορῶν. οὐκέτι γὰρ ἔσονται

² del. Düring

³ addidi: εἰ χρόα *m*, Düring, FHS&G

⁴ διαφέρει Düring, FHS&G

⁵ add. Wallis

⁶ ἢ *g*

⁷ add. Schneider

⁸ ἢ (sic) Düring

⁹ συμβέβηκε Schneider, Düring, FHS&G

¹⁰ ἢ ἄκ. Van Raalte, *privatim*: ἢ ἄκ. *codd.*: ὁ ἄκ. Schneider: ἢ ἀριθμός FHS&G: ὁ ἀριθμός Wallis

¹¹ ἢ φωνή; ἢ φωνὴ δ' εἰ (*vel* φωνὴ ἢ φωνή; εἰ δ' ἢ) Alexanderson: φωνή; ἢ φωνὴ δ' ἢ *codd.*

- 35 διαφοραὶ παρὰ τὰ πλήθη, ἀλλὰ παρὰ τὴν ιδιότητα τῶν φωνῶν ὥσπερ ἐν τοῖς χρώμασιν. οὐδὲν¹² γὰρ χρῶμα ἀπλοῦν ἀπλοῦ χρώματος ποσότητι διαφέρει· ἴσαι γὰρ ἂν εἶεν αἱ ποσότητες· ὥσπερ εἰ συμμιγείῃ ἡ μέλαν λευκῷ, ἴσφ ἴσον, οὐκ ἂν οἱ τοῦ λευκοῦ ἀριθμοὶ τῶν τοῦ μέλανος πλείους λέγοιντο, οὐδ' ἂν οἱ τοῦ μέλανος τῶν τοῦ λευκοῦ. οὕτως οὐδὲ
- 40 γλυκεῖ¹³ πικρόν—ἕκαστον γὰρ καθ' ὃ ἐπιτέταται¹⁴ ἴσον—ἀλλ' ἔστι τὸ πλήθος ἐπ' ἴσον ἐπιτεταμένον¹⁵ κατὰ τὸ ἴδιον. οὕτως οὐδὲ ἡ ὀξεῖα φωνὴ ἐκ πλειόνων συνέστηκεν ἢ πλείους ἀριθμοὺς κινεῖται, οὔτε ἡ βαρεῖα. οἷόν τε γὰρ καὶ ταύτην λέγειν ἢ κάκεινην, ἐπειδὴ ἴδιόν τι μέγεθος βαρείας ἐστὶ φωνῆς.
- 45 5. δῆλον δ' ἐκ τῆς βίας τῆς γινομένης περὶ τοὺς μελωδοῦντας· ὥς γάρ τινος δέονται δυνάμεως εἰς τὸ τὴν ὀξεῖαν ἐκφωνῆσαι, οὕτω καὶ εἰς τὸ τὴν βαρεῖαν φθέγγασθαι. ἔνθα μὲν γὰρ συνάγουσι τὰ πλευρὰ καὶ τὴν ἀρτηρίαν ἐκτείνουσι [διὸ βραχύτερον]¹⁶ βίᾳ ἀποστενοῦντες, ἔνθα δὲ διευρύνουσι τὴν ἀρτηρίαν, διὸ βραχύτερον τὸν τράχηλον ποιοῦσι τὸ
- 50 μῆκος τῆς εὐρύτητος συναγωγῆς. τὸ αὐτῇ εἵκειν¹⁷ ἔν τε τοῖς αὐλοῖς εἰς τὸ ἐμπνεῦσαι βίᾳ τῷ στενωτέρῳ δυνάμεως δεῖν καὶ εἰς τὸ τῷ εὐρυτέρῳ, ἵνα πληρωθῇ. καὶ γὰρ δὴ καὶ μᾶλλον ἐν τοῖς αὐλοῖς· ἀπονώτερον γὰρ τὸ ὀξύ τῷ διὰ τῶν ἄνω γίνεσθαι τρημάτων, βίας δὲ δεόμενον τὸ βαρὺ καὶ μείζονος, εἰ δι' ὅλου τὸ πνεῦμα πέμποιτο, ὥστε
- 55 ὅσον μήκους προστίθεται, τοσόνδε καὶ πνεύματος ἰσχύος προστίθεται. ἐν δὲ ταῖς χορδαῖς τὸ ἴσον κατὰ θάτερον δῆλον· ὅσφ γὰρ εὐτονωτέρα ἡ τῆς λεπτοτέρας τάσις, τοσῶδε ἡ ἀνεῖσθαι †δοκοῦσα† παχυτέρα· οὕτω τε ὅσφ ἰσχυρότερος ὁ ἦχος ἐκ τῆς λεπτοτέρας, τοσῶδε βαρύτερος ὁ ἔτερος· ἐκ γὰρ μείζονος ὁ πλείων καὶ τοῦ¹⁸ περίξ ἦχος.
- 60 6. πῶς γὰρ ἂν σύμφωνοι ἐγίνοντό τινες φθόγγοι, εἰ μὴ ἰσότης ἦν; ἀσύγκρατον γὰρ τὸ πλεονάζον· τὸ γὰρ ὑπέρμετρον ὑπὲρ τὴν μείξιν διάδηλον γίνεται. διὸ τοῖς κατὰ τὴν κρᾶσιν ἰσχυροτέροις τὸ ἀνειμένον πλεῖον ἐπιμείγνυται εἰς τὸ ἰσοδυναμῆσαι· ὥστ' εἰ ἔστι τις συμφωνία, καὶ ἰσότης τῶν ἐξ ᾧ γίνεται. εἰ γὰρ ὁ ὀξύς πλείους κινεῖτο ἀριθμούς,
- 65 πῶς ἂν συνήχησις γένοιτο; καὶ γὰρ εἰ, ὥς φασιν, καὶ πορρωτέρω ἀκούεται ὁ ὀξύτερος φθόγγος τῷ πορρωτέρῳ διὰ τὴν τῆς κινήσεως ὀξύτητα διικνεῖσθαι [ἢ διὰ τὸ πλήθος γίνεσθαι]¹⁹ οὐκ ἂν ποτε γένοιτο

¹² οὐδὲ *p*¹³ ET: τῷ γλυκεῖ cett.¹⁴ ἐπιτέτακται Schneider¹⁵ ἐπιτέτακται MG: ἐπιτεταγμένω *p*¹⁶ del. Düring¹⁷ ταύτῃ ἔοικεν Düring: τοιαύτης ἔοικεν Schneider¹⁸ delendum esse dubitanter coni. in comm. Düring¹⁹ delevi: εἰ διὰ τὸ πλήθος γίνεται Wallis: ἦν διὰ τὸ πλήθος γίνεσθαι Alexanderson: τῷ διὰ τὸ πλήθος γίνεσθαι Düring, FHS&G

σύμφωνος [αὕτη]²⁰ πρὸς τὸν βαρύν, οὐθ' ὅτε μόνος ἀκούεται—εἴ γ' ἐν ἀμφοτέροις ἢ συμφωνία—οὐθ' ὅτε ἐκλείπει ὁ βαρύτερος²¹—ἀνάγκη γὰρ
 70 κατὰ τὴν λεληθυῖαν ἔκλειψιν μηκέτ' ἀκούεσθαι· οὔτε²² μάλιστα ἄμφω ἀκούονται· καὶ τότε γὰρ ὁ ὀξύς σφοδρότερός ἐστιν, ἅτε οἶός τε ὦν καὶ πόρρω δεικνεῖσθαι. φθάνει τε οὖν τὸν βαρύν καὶ κατισχύει, ὥστε σφετερίζεσθαι τὴν αἴσθησιν, αἰεὶ μειονεκτοῦντος²³ τοῦ βαρυτέρου.

7. ἀλλ' ἐπεὶ ἐστὶ τι σύμφωνον, ἰσότητα δηλοῦν ἀμφοῖν τοῖν φθόγγοιν,
 75 ἰσότης ἐστὶ τῶν δυνάμεων διαφέρουσα τῇ ιδιότητι ἐκατέρᾳ· τὸ γὰρ ὀξύτερον φύσει ὃν ἐκδηλότερον, οὐκ ἰσχυρότερον, πορρωτέρω ἀντιληπτὸν ἐστὶ τοῦ βαρυτέρου, ὥσπερ τὸ λευκὸν ἄλλου τοῦ²⁴ χρώματος ἢ τι ἕτερον, ὃ οὐχὶ τῷ θάτερον ἡττον εἶναι ὃ πέφυκε μᾶλλον ἀντιληπτὸν ἐστὶν ἢ τῷ μὴ τοὺς ἴσους ἀριθμοὺς κινεῖσθαι, ἀλλὰ τῷ μᾶλλον τῷδε ἢ
 80 τῷδε ἐπιβάλλειν τὴν αἴσθησιν διὰ τὴν πρὸς τὰ πέριξ ἀνομοιότητα. οὕτως δεικνύεται μὲν καὶ ὁ βαρὺς, ἢ δ' ἀκοή θάττον ἀντιλαμβάνεται διὰ τὴν ιδιότητα τοῦ ὀξέος, οὐ διὰ τὸ ἐν αὐτῷ πλῆθος. καὶ γὰρ δὴ γε, εἰ καὶ πορρωτέρω ἐκινεῖτο,²⁵ οὐ διὰ τὸ πλείους κινεῖσθαι ἀριθμοὺς [ὁ ὀξύτερος]²⁶ ἀλλὰ διὰ τὸ σχῆμα, ἐπειδὴ ὁ μὲν ὀξύς ἡχος πρόσω μᾶλλον
 85 φέρεται καὶ ἄνω, ὁ δὲ βαρὺς πέριξ κατ' ἴσον μᾶλλον.

8. δῆλον δὲ καὶ ἐκ τῶν ὀργάνων· τὸ μὲν γὰρ ὑπὸ κέρας καὶ τὸ²⁷ σὺν τῷ χαλκῳματι περιηχητικώτερα, ἅτε τοῦ ἡχου ἴσου περὶ πᾶν γινομένου. καὶ γὰρ εἴ τις ὀξὺν φθεγγόμενος φθόγγον ἄπτοιο τῆς αὐτοῦ πλευράς, ἔπειτα πάλιν βαρύν, αἰσθάνοιτο ἂν μᾶλλον ἐπὶ τοῦ βαρέος φθόγγου τῇ
 90 χειρὶ τῆς περὶ τὴν πλευρὰν κινήσεως. κἂν τοῦ ὀργάνου ἄπτηται τῆς χέλους ἢ τοῦ κέρατος ἢ ἀγκῶνος, ὁπότε τὴν λεπτὴν τύπτει καὶ τὴν τοῦ βαρέος προετικήν, πάλιν ἐπαίσθοιτο ἂν μᾶλλον τῆς περὶ τὸ κύτος κινήσεως, ὁπότε τὴν τοῦ βαρυτέρου τύπτει ἡχου προετικήν· εἰς πᾶν γὰρ ὁ βαρὺς φθόγγος δεικνύεται πέριξ, ὁ δ' ὀξύς πρόσω ἢ εἰς ὃ βιάζεται
 95 ὁ φθεγγόμενος. εἰ οὖν ὅσον πρόσω κινεῖται ὁ ὀξύς, τοσόνδε περὶ πᾶν κινεῖτο ὁ βαρὺς, οὐκ ἂν ἐλάττους κινεῖτο ἀριθμοὺς. ὅπερ καὶ τῶν αὐλητικῶν δῆλον· ὁ γὰρ μακρότερος αὐλὸς βαρύτερος, ἐν ᾧ πλεῖον τὸ πνεῦμα, περὶ ὃ πᾶν ἡ κίνησις. ἀλλ' οὐδὲ τάχει ἂν διαφέρει ὁ ὀξύς· προκατελαμβάνετο γὰρ ἂν τὴν ἀκοήν, ὥστε μὴ γίνεσθαι σύμφωνον· εἰ δὲ
 100 γίνεται, ἰσοταχοῦσιν ἄμφω.

²⁰ delevi: οὔτος Wallis, FHS&G

²¹ ὁ βαρύτερος dell. Alexanderson, FHS&G

²² οὐθ' ὅτε Höeg, FHS&G

²³ T, Schneider: μὴ μειονεκτοῦντος cett., FHS&G: μὴν μ. Wallis

²⁴ Alexanderson: τοῦ codd.

²⁵ ἐξικνεῖτο Wimmer

²⁶ delevi

²⁷ τὰ (bis) Düring, FHS&G

9. οὐχὶ οὖν ἀριθμοὶ τινες ἄνισοι τὸν τῶν διαφορῶν λόγον ποιοῦσιν, αἱ δὲ φύσει τοιαίδε φωναὶ φύσει συνηρμοσμένοι οὔσαι. οὐδὲ γὰρ τὰ διαστήματα, ὡς τινὲς φασιν, αἷτια τῶν διαφορῶν, διὸ καὶ ἀρχαί, ἐπειδὴ καὶ τούτων παραλειπομένων αἰεὶ διαφοραί· οὐ γὰρ ὧν παραλειπομένων²⁸
- 105 γίνεται τάδε αἷτια τοῦ εἶναι, οὐχ ὡς ποιοῦντα, ἀλλ' ὡς μὴ κωλύοντα. οὐδὲ γὰρ ἡ ἐκμέλεια τῆς ἐμμελείας αἷτια ἐπειδὴ οὐκ ἂν γένοιτο ἐμμέλεια, εἰ μὴ ἡ ἐκμέλεια παραπέμποιτο· οὐδ' ἂν τι ἄλλο [ἐπιστημονικόν]²⁹ γένοιτο, εἰ μὴ τὸυναντίον [ἀνεπιστήμον τοῦ ἐπιστήμονος].³⁰ οὐδὲ γὰρ ὡς ὃν αἷτιον [ἀνεπιστήμον τοῦ ἐπιστήμονος],³¹ ἀλλὰ παραπεμπόμενον,
- 110 τῷ μὴ κωλύειν. ὥστ' οὐδὲ τὰ διαστήματα τοῦ μέλους αἷτια ὡς ποιοῦντα, ἀλλ' ὡς μὴ κωλύοντα. εἰ γὰρ τις ἅμα φθέγγοιτο κατὰ τὸ συνεχὲς καὶ τοὺς μεταξὺ τόπους, ἂρ' οὐκ³² ἐκμελῇ προίκοιτο φωνήν; ὧν οὖν μὴ παραπεμπομένων ἐκμέλεια γίνοιτο ἂν, οὐχὶ τούτων παραλειπομένων ἡ ἐμμέλεια, ὡς εἰ μὴ παραλειφθεῖεν κωλυσόντων. μέγα οὖν ὄφελος τὸ
- 115 περιίστασθαι ταῦτα εἰς³³ τὴν μελωδίαν, ὥστ' ἀνευρίσκειν τοὺς συνηρμοσμένους πρὸς ἀλλήλους φθόγγους· ἀλλ' οὗτοι μὲν αἷτιοι τοῦ μέλους ὄντες, τὰ δὲ διαστήματα παραπεμπόμενα ἐπιδηλούμενα ἐκμελείας αἷτια ἔστιν, ἧς καὶ ἀρχαὶ λέγοντ' ἂν, οὐχὶ τῆς ἐμμελοῦς φωνῆς.
10. οὗτ' οὖν τὰ διαστήματα αἷτια τῆς ἐμμελείας, ἀλλὰ βλαπτικὰ αὐτῆς
- 120 φαινόμενά γε, οὗθ' οἱ ἀριθμοὶ αἷτιοι τῷ ποσότητι διαφέρειν ἀλλήλων τοὺς φθόγγους. κατ' ἄλλο γὰρ ἴσοι εὐρίσκονται οἱ βαρεῖς τοῖς ὀξέσι, καθ' ὃ καὶ ὁ πόνος ἴσος κατὰ τὸυναντίον· οὐ γὰρ ἦττον τῶν τοὺς ὀξεῖς φθόγγους φθεγγομένων οἱ τοὺς βαρεῖς πονοῦσι βιαζόμενοι εἰς τὸυναντίον πάλιν. μία δὲ φύσις τῆς μουσικῆς, κίνησις τῆς ψυχῆς ἡ κατ'
- 125 ἀπόλυσιν γινομένη τῶν διὰ τὰ πάθη κακῶν. ἡ εἰ μὴ ἦν, οὐδ' ἂν ἡ τῆς μουσικῆς φύσις ἦν.

Translation

1. For the movement productive of melody which occurs around the soul is exceedingly accurate: when the soul wishes to express it with vocal sound, it directs the sound, and—to the extent that it is able to direct that which is without ‘logos’—it does so in accordance with what it wishes. Some people have fixed their aim on referring its accuracy to the numbers. They maintained that the ratios between these account for

²⁸ αἰεὶ . . . παραλειπομένων om. g.

²⁹ secludendum?

³⁰ secludendum?

³¹ secludendum?

³² οὐκ scripsi: οὖν codd.

³³ ταῦτα εἰς Alexanderson: ταύταις codd.

the accuracy of the intervals: for one and the same, they said, is the ratio of the octave as that of the duple, the ratio of the fifth as that of the hemiolic, and the ratio of the fourth as that of the epitritic; and in the same way all the other intervals, just as the other numbers, have their own specific ratio. Thus, they maintained, music consists in quantity, since it is along with quantity that the differences arise.

2. In saying this they seemed to some people to be more intelligent than the *harmonikoi*, who judge by perception, in that they themselves discriminated by the ratios of the intelligible numbers. These people did not know that, if the difference is indeed quantity, it occurs along with what is different in quantity. Hence colour also, if colour would differ from colour by quantity, which is inevitable, will be melody or part of melody too—if, that is to say, melody and interval are number, and melody and its difference are due to number. For also if every interval is a certain numerable quantity, and melody arises from notes that are different, melody will be such as it is because it is number. If, however, melody is nothing but number, everything numerable will also participate in melody to the extent that it also participates in number.

3. If, as in the case of colour, we take it that numerable quantity is an attribute to what itself is something different, then in the case of notes also a note is one thing and the numerable quantity that goes with it another. But if a note *qua* being heard is another thing, then both the heavier and the sharper note differ from one another either as notes or as <different> in numerable quantity. If they differ in virtue of numerable quantity, and if the sharper note is as it is by having a more-numbered movement, the heavier by having a fewer-numbered movement, what else will be the characteristic property of the sound? For every <sound> impresses itself on the senses either as sharp or as heavy. For every sound is sharper than this one and heavier than that one, so that the numerable quantity of the one is smaller and that of the other greater, and hence it is a number. When number is taken away, what else in virtue of which it is a sound can that which remains be? If the sound is either sharper or heavier than some other sound, it is sound that possesses quantity; while if something else <possesses quantity>, there will no longer be such a thing as a sound.

4. If, however, it will be *qua* notes that sharp and heavy notes differ from one another, we shall no longer be in need of numerable quantity: their own intrinsic difference will be sufficient on its own to let melody arise, and there will be knowing of the differences. For the differences

will no longer be differences in virtue of numerable quantities, but in virtue of the distinctive character of the sounds, as in the case of colours. For an elementary colour does not differ from an elementary colour in quantity, for it is possible for their quantities to be equal: when, for example, one mixed (1) black and white, an equal amount with an equal amount, the numbers of the white cannot possibly be said to be more than the numbers of the black, nor the numbers of the black than those of the white. In the same way (2) <the numbers cannot be said to be more> when <one mixed an equal amount of> bitter with <an equal amount of> sweet—for each is equal in proportion to its contribution to the strength of the mixture—but their numerable quantity is equally strengthened, in accordance with the distinctive character <of each>. In the same way the sharp sound does not consist of more numbers nor has it a more-numbered movement, neither does the heavy one: one can say this of the latter as well as of the former, since a heavy sound has its own characteristic magnitude.

5. This is clear from the force exerted when people sing. For just as they need a specific power in order to give out a sharp sound, so do they also in order to utter a heavy one. In the one case they draw in the ribs and stretch out the windpipe, narrowing it by force; in the other they widen the windpipe, which is why they make the throat shorter, the width contracting the length. Likewise, in the case of the *auloi* power is needed to blow with force into a narrower one as well as to blow into a wider one, so as to fill it. In the case of the *auloi* it is even more so: for the sharp note requires less labour, owing to its passing through the holes that are higher up, while a heavy note demands even greater force, if the breath is sent through the whole <pipe> so that, to the amount that length is added, strength of breath is added too. In the case of strings the equality of sharp and heavy notes is clear in either way: for by the same amount that the tension of the thinner string is more tightened, the string (¿ which is judged to?) be slackened is thicker; and, likewise, to the amount that the resonance that comes from the thinner string is stronger the other <note> is heavier—for it is from a larger <string> that there comes also the more abundant resonance of what is around it.

6. For how could certain notes be concordant, if there were no equality? For what is in excess is incapable of blending, since what is beyond the measure of the mixture becomes perceptible. This is why with the stronger elements in the blend we mix a greater amount of what is less strong, in order to produce equality of power. Hence, if there is a con-

cord there is also equality of its components. For if the sharp note would have a more-numbered movement, how could a sounding together arise? For also if, as they say, the sharper note is also heard at a greater distance through its reaching further because of the sharpness of its movement [or because a numerable quantity arises], then it can never be concordant in relation to the heavy one: neither when it is heard alone, considering that the concord consists of both sounds; nor when the heavier sound suffers eclipse, for because of the unnoticed eclipse inevitably it is no longer heard; and least of all they are heard both, for then also the sharper note is more vigorous, considering that it is capable of travelling far too. So it outstrips and overpowers the heavy note, and consequently appropriates the perception for itself, the heavy note being in all cases the poorer.

7. But since some concordance exists, evidencing equality of the two notes, there is equality of their powers, differing in the characteristic property of each. For it is by being naturally more conspicuous, not by being stronger, that the sharper is capable of being apprehended at a greater distance than the heavier, just as the white is <capable of being apprehended at a greater distance> than any other colour, or anything else that is more capable of being apprehended, not because the other thing is less what it naturally is, or because it does not have an equally-numbered movement, but because of the fact that perception falls more on the one than on the other owing to its unlikeness to its surroundings. Thus the heavy note penetrates too, but the hearing grasps the sharp note more quickly because of its characteristic property, not because of the numerable quantity in it. For, even if it would move over a greater distance, this is evidently not because it has a more-numbered movement, but because of its shape, since the sharp tone travels more forwards and upwards, the heavy one more equally round about.

8. This is evident also from the instruments. For the horn that is below and the instrument equipped with a bronze vessel are more resonant round about, since the resonance becomes equal all around. Further, if when uttering a sharp note one were to touch one's own ribs, and then <when uttering> a heavy one, one would feel with one's hand the movement about the ribs more in the case of the heavy note. And when one touches the tortoise shell or the horn or the arm of the instrument, whenever one were to strike the thin <string> and the string which generates a heavy sound, once again one would feel the movement of the sounding board more when one struck the string that generates the heavier tone.

For the heavy note reaches all around, while the sharp note reaches forwards or in the direction in which the utterer compels it to go. If, then, the heavy note would move all around to the same degree as the sharp note moves forwards, it cannot possibly have a fewer-numbered movement, as is plain too from the facts about *auloi*. For the larger aulos is heavier-pitched, being the one in which there is more breath, through all of which the movement goes. But neither can the sharp note be different <from the heavy one> by <its> speed: it would occupy the hearing first, with the effect that concord would not arise. If it arises <as it does>, both are of equal speed.

9. It is then not certain numbers that by being unequal account for the differences, but the sounds being such as they are by nature being by nature attuned together. Nor are the intervals, as some people contend, the causes of the differences—and hence also the principles—since even if these are left out there still remain differences. For if something arises when certain things are left out, it is not the things left out that are the causes of its existence, not as productive, but as not preventing. For one cannot regard the unmelodic as the cause of the melodic on the ground that the melodic would not come into being if the unmelodic were not rejected; nor would any other thing [the knowledgeable] arise on the mere condition that its opposite [the unknowing of the knowledgeable] does not: not, that is to say, as being the cause [the unknowing of the knowledgeable], but by being rejected, by not preventing. Neither then can the intervals be the causes of melody as producing it, but as not preventing it. For if someone would utter in a continuous movement of the voice the intervening positions as well, would he not produce an unmelodic sound? It is then through their not being rejected that the unmelodic will arise, certainly not through their being left out <that> the melodic <will arise> on the ground that, if they would not be left out, they will prevent it. That these are avoided is, then, a great help for the melody, so that we may find the notes that are attuned to one another; but it is these notes that are the causes of the melody, while the rejected intervals, through being made manifest, are the causes of the unmelodic—of which they might also be said to be the principles, not, <however> of the melodic sound.

10. Neither then are the intervals the causes of melody, but they damage it—that is to say if they become apparent—nor are the numbers causes by the notes' differing from one another in virtue of quantity. For in an other respect the heavy notes are found to be equal to the sharp ones;

accordingly, the labour <involved> is also equal, in opposite respects: for people uttering heavy notes labour no less than those uttering sharp ones—exerting their effort contrariwise in the opposite direction. There is <only> one <thing that can be said to be the> nature of music: the movement of the soul that occurs with a view to release from the evils due to the emotions. If it were not this, neither would the nature of music exist.

II. Commentary

1–10. *In order to explain the accuracy with which the soul expresses its movement in sound the ‘Pythagoreans’ appeal to their discovery that intervals between notes can be expressed as ratios between numbers. According to them music consists in quantity since it is along with quantity that the musical differences arise.*

1. γάρ: We do not know what statement this sentence was meant to explain. It may, however, be gathered from the last sentence of our fragment that the argument quoted by Porphyry was part of a discussion of the φύσις of music. Cf. *ad* 103 *infra*.

1. κίνημα . . . περὶ τὴν ψυχὴν: At the end of Theophrastus’ argument (line 124) this expression³⁴ (cf. 92–93: τῆς περὶ τὸ κύτος κινήσεως) will be replaced with the more straightforward κινήσις τῆς ψυχῆς: Theophrastus seems to have been less reluctant than Aristotle to make the ψυχὴ subject to physical κινήσις.³⁵

2. φωνῇ: I have translated “with vocal sound” (rather than “with the voice”) in order to bring out that Theophrastus is referring to the human voice *as a musical instrument* (cf. *ad* τὴν ἄλογον *infra*). If he had intended to refer to the human voice as such he presumably would have

³⁴ Cf. Arist. *De An.* 420b27–29: ὥστε ἡ πληγὴ τοῦ ἀναπνεομένου ἀέρος ὑπὸ τῆς ἐν τούτοις τοῖς μορίοις ψυχῆς πρὸς τὴν καλουμένην ἀρτηρίαν φωνὴ ἐστίν.

³⁵ Aelius Festus Aphthonius (719B FHS&G) tells us that Theophrastus stated “*incentivum et non parvos impetus his, quibus cordi est carmen per mele [metrorum numeros] edere, ab adfectionibus, quas Graeci πάθη appellant, suggeri et quibusdam incalcescentis ingenii stimulis incitari, quibus sublime cothurnatum canorum et tragici ponderis carmen edatur.*” *Ingenium* is a surprising word in a context like this. There seems, however, to be no good reason to believe, with the translator in FHS&G, that *ingenium* represents “heart” rather than (some aspect or part of) ψυχή.

written τῇ φωνῇ. Further on in our text (for instance, 29–30: τί τὸ ἀπολειπόμενον εἴη ἄλλο τι καθ’ ὃ φωνή;) φωνή consistently means ‘(musical) sound.’

2–3. **τρέπει . . . τήνδε**: For the expression cf. 719A FHS&G (= Plut. *Quaest. Conv.* 623A): λέγει δὲ (sc. Theophrastus) μουσικῆς ἀρχὰς τρεῖς εἶναι, λύπην, ἡδονήν, ἐνθουσιασμόν, ὡς ἐκάστου τῶν παθῶν τούτων παρατρέποντος ἐκ τοῦ συνήθους καὶ παρεγκλίνοντος τὴν φωνήν. Aristoxenus (*El. Harm.* 9.30 = dR 14.30ff., quoted *ad 4 infra*) also associates the movement of the voice which is characteristic of music with πάθος, and contrasts it with the way the voice moves in normal speech. According to Barker (1985, 314) “It is perhaps no accident that Theophrastus’ word for ‘directing’ the melody in the appropriate way is *trepein*, (...) allied to the noun *tropos*, commonly used in musical sources to mean ‘style,’ and often linked with or substituting for *harmonia*. The singer must be able to produce a melody in the right *tropos*.” Cf., however, *ad 4 infra*.

3. **ἐφ’ ὅσον οἷα τ’ ἐστί**: Barker (1989, 111, n. 2) refers to “some Arabic sources” representing Theophrastus as saying that “the soul has ‘conformations’ which it cannot express in words, and therefore expresses through melody and bodily movement.” “In that case,” he says, “the point will not be that the soul’s capacity to ‘turn’ the voice melodically is limited, but rather that it extends even further than its power to represent its condition in words.” Among the testimonia on “Music and the Soul” in FHS&G only Source nr. 722 (from an Arabic *Depository of Wisdom Literature*) contains something like this: “Singing is a virtue in speech that is obscure to the soul and incapable of having its innermost essence clearly stated; so it (the soul) expresses it (this virtue) in melodies.” However, the more natural interpretation of ἐφ’ ὅσον appears to be that it is meant as a limitation of the soul’s ability to ‘turn’ or ‘direct’ φωνή.

3. **τὴν ἄλογον**: “that (sc. φωνή) which is without logos.” My rendering aims at bringing out the different connotations of the Greek expression: 1) sound is something ‘irrational,’ and therefore ‘unmanageable’: it may, so to speak, ‘resist’ the guidance of the ψυχή instead of, like a kind of seismograph, registering automatically its movement; 2) ἄλογος has a special relevance in relation to a theory which refers to the

λόγοι of the intervals in order to account for the ‘accuracy’ with which the soul expresses its movement; 3) although μελωδία normally implies a song-text, the φωνή as a musical instrument is something ‘without words,’ because the melody can be detached from the text.

4. ἥς: The natural candidate for the role of an antecedent to this relative pronoun³⁶ is the φωνή being directed by the ψυχή.

4. τὴν ἀκρίβειαν: In order to establish what kind of accuracy Theophrastus has in mind we may compare Aristoxenus, who held that melody becomes more ἀκριβές the more we are able to bring the voice to a standstill on the τάσεις which constitute the melody: διόπερ ἐν τῷ διαλέγεσθαι φεύγομεν τὸ ἰστάναι τὴν φωνήν, ἂν μὴ διὰ πάθος ποτὲ εἰς τοιαύτην κίνησιν ἀναγκασθῶμεν ἐλθεῖν, ἐν δὲ τῷ μελωδεῖν τοῦναντίον ποιοῦμεν· τὸ μὲν γὰρ συνεχὲς φεύγομεν, τὸ δ’ ἐστάναι τὴν φωνήν ὡς μάλιστα διώκομεν. ὅσῳ γὰρ ἂν μᾶλλον ἐκάστην τῶν φωνῶν μίαν τε καὶ ἐστηκυῖαν καὶ τὴν αὐτὴν ποιήσωμεν, τοσούτῳ φαίνεται τῇ αἰσθήσει τὸ μέλος ἀκριβέστερον (*El. Harm.* 9.30 = dR 14.30ff.): so the ἀκρίβεια of a μέλος depends on the ability of the singer to hit exactly the pitches that will constitute a melody. I do not agree with Barker (1985, 314), who takes it that Theophrastus is principally considering the ability of the singer “to produce a melody of the right sort to represent his psychic state” (my italics): that would be a matter of ὁρθότης rather than of ἀκρίβεια.

4. ἐπεβάλλοντο ... ἀναπέμπειν: The expression has the ring of irony: the τινες “have fixed their aim on”³⁷ remitting the matter to the numbers” (ἀναπέμπειν being the κύριον ὄνομα for referring something to a competent authority: see LSJ s.v.).

4–10. For the doubts Theophrastus has about (ratios between intelligible) numbers as a possible ‘cause’ of a κίνημα cf. *Met.* 4a21ff. about the μαθηματικά: οἷον γὰρ μεμηχανημένα δοκεῖ δι’ ἡμῶν εἶναι σχήματά τε καὶ μορφάς καὶ λόγους περιτιθέντων, αὐτὰ δὲ δι’ αὐτῶν οὐδεμίαν ἔχει φύσιν· εἰ δὲ μή, οὐχ ὥστε συνάπτειν τοῖς τῆς φύσεως ὥστ’ ἐμποιῆσαι καθάπερ ζῶν καὶ κίνησιν αὐτοῖς: “for they seem to be, so

³⁶ Cf. Sicking and Van Ophuijsen 18–19 about ‘Relative Connection.’

³⁷ Cf. Arist. *Pol.* 1258a3: ὅσοι τοῦ εὖ ζῆν ἐπιβάλλονται, 1260b37: ἐπιβαλέσθαι τὴν μέθοδον.

to speak, products contrived by us as we invest <things> with figures, shapes and proportions—but they themselves by themselves have no nature at all. And if they *have* one, then they do not have such a one as to connect with the things of nature so as to produce in them things like life and movement” (transl. Van Raalte). Cf. also Arist. *Met.* 1093b7ff.

5. **τὴν ἀκρίβειαν τῶν διαστήματων**: According to this view music-making is—to borrow a felicitous phrase from Barker (1989, 110)—“a sort of intuitive applied mathematics.”

9. **ἴδιον**: The concept of ἴδιον/ιδιότης will turn out to be an important one (cf. 26, 35, 41, 43, 75, 82 *infra*).

10. **ποσότητι**: ποσότης is the encompassing category, under which ἀριθμός, πλῆθος &c. are subsumed.

10. **ἐπειδὴ παρὰ τήνδε αἱ διαφοραί**: So it is quantity that causes the differences. Cf. LSJ s.v. παρὰ “(6) of the margin by which anything increases, and so of the cause according to which anything comes into existence or varies” and “(7) more generally of the margins by which an event occurs, *i.e.*, of the necessary and sufficient cause or motive.”

11–20. *If, however, as the Pythagoreans have it, melody is such as it is because it is number, then melody is nothing but number. Hence everything numerable—such as, for instance, colour—will participate in melody too. The same absurd conclusion applies if one defines every interval as a certain numerable quantity.*

11. **τισιν**: Barker (1989, 112 n. 4) observes that this may well refer to Plato, in view of his mockery (*Resp.* 531A–B) “of those who ‘prefer their ears to their intelligence’.”

11–12. **τῶν ἁρμονικῶν καὶ αἰσθήσει κρινόντων**: Barker (1985, 308) observes that Aristoxenus may properly be included with these ‘champions of *aisthesis*’: “certainly there is no doubt that Theophrastus would be on Aristoxenus’ side when the latter dismisses the views of those who ‘reject *aisthesis* as being inaccurate, inventing ‘intelligible’ (*noetas*) causes, and saying that it is in certain ratios of numbers and relative velocities that high and low pitch come about’ (*El.*

Harm. 32.21-26).” This, however, does not imply that Theophrastus shared Aristoxenus’ ideas about ‘the nature of music’: cf. *ad* 17–18 and 103 *infra*.

12–20. For the argument cf. Arist. *Met.* 1093a1f.: εἰ δ’ ἀνάγκη πάντα ἀριθμοῦ κοινωνεῖν, ἀνάγκη πολλὰ συμβαίνειν τὰ αὐτά.

12. ἐπικρίνοντες: For ἐπικρίνω: “to determine relevant differences” cf., for instance, Arist. *De An.* 431a20: ἐπικρίνει τί διαφέρει. The implication (confirmed by the next sentence: εἰ μέντοι ποσότης ἐστὶν ἡ διαφορά) seems to be that, according to the συνετώτεροι, the ἀρμονικοί—αἰσθήσει κρίνοντες—are unable to account for the *differences* between the notes. This makes it impossible for them to have real knowledge of music. Cf. *ad* 34 *infra*.

12. οὔ: i.e., those who judge the ‘quantitativists’ more intelligent than the *harmonikoi*. οἱ δέ would refer to the ‘quantitativists’ themselves.³⁸

13. εἰ μέντοι: εἰ μέντοι typically prepares the reader for an implication (or consequence) of what is stated by the protasis which is unexpected for the audience (in this case: for those referred to by *τινες* in line 11).³⁹

13–14. γίνεται αὕτη παρὰ τὸ ποσότητι διάφορον: Hence one cannot have difference in ποσότης without having at the same time the difference which constitutes music.

14. κἂν μέλος ἢ μέλους μέρος εἶη: The transmitted text has this phrase both here and (omitting μέρος) in the following line. FHS&G retains it at both places. The argument, however, seems to be as follows: “if ἡ διαφορά is ποσότης then you have this διαφορά whenever you have difference *qua* ποσότης. Hence, if one colour differs from another by quantity (as it must), then colour too will be melody.” The first time κἂν μέλος ἢ μέλους μέρος εἶη occurs it 1) disturbs the argument; 2) can hardly be said to be something the opponents “did not know.” Moreover, it is difficult to explain how the διαφορά (αὕτη) can be said to be “melody or part of melody.”

³⁸ Cf. n. 36.

³⁹ Cf. Sicking and Van Ophuijsen 33f.

14–15. ἡ <χρόα, εἰ> χρόα: A case of *saut du même au même*. With the text of *m* (εἰ χρόα χρόας ποσότητι διαφέρει, accepted by Düring and FHS&G) the sentence is awkward, because we are left without a topic (or a subject) for μέλος . . . εἴη. This would be the more surprising because Theophrastus' point (underlined by the repetition of καί in κᾶν) is precisely that, if one would accept the theory he is discussing, *colour* also would have to be a kind of melody.

15. ὅπερ ἀνάγκη: We may rule out that this is ἀνάγκη for Theophrastus himself, since it is clear from line 37ff. *infra* that he did not believe that “colour differs from colour by quantity.” There remain, then, two ways of interpreting this parenthesis: 1) “Hence colour also, if colour would differ from colour by quantity—as *ex hypothesi* it must—will be melody or part of melody.” In this case we are to take it that, according to Theophrastus, ποσότης ἐστὶν ἡ διαφορά (line 13) entails that “whenever you have διαφορά, you have ποσότης.” This may be not compelling from a logical point of view, but we have, of course, to remember that the ‘Pythagoreans’ held differences *qua* φύσις to be differences *qua* number (see, e.g., Arist. *Met.* 1090a20ff.). 2) “Hence colour also, if we take it that colour differs from colour by quantity—inevitably—will be melody or part of melody.” In this case ὅπερ ἀνάγκη stresses in advance that plain logic forces the τινες to admit that any difference in quantity one can imagine will result in the differing entities being μέλος ἢ μέλους μέρος. I am inclined to prefer the former interpretation: word order is in favour of making the parenthesis refer to what precedes rather than to what is to follow—although it, perhaps, does not exclude the latter. Moreover, Theophrastus' argument gains in force if it is based on something his opponents would have to admit, instead of on a mere assumption which he himself would not be prepared to make, and which his opponents would have freedom to reject.

16–17. εἴ γε ... διαφορά: The sentence restates the basic assumption which supposedly has been shown to imply that any two items that differ from one another must differ in quantity and therefore must produce “melody or part of melody.” Hence, even the different colours of the books in my bookcase would have to be different in quantity, and would thereby produce some kind of melody—which, of course, (*pace* Scriabin and Messiaen) is absurd.

17–18. καὶ γὰρ εἰ πᾶν διάστημα πλῆθος τι: The translator in FHS&G (“For if every interval were a plurality”) apparently reads the sentence as offering “alternative ways of interpreting the original, imprecise slogan that musical differences are differences of quantity” (Barker 1985, 295). However, 1) we have to account for the presence of καί, and, more importantly, 2) the expression εἰ πᾶν διάστημα πλῆθος τι does not apply to the ‘Pythagorean’ view that has been discussed before (a ratio is no πλῆθος or ‘numerable quantity’), nor is it a natural way to refer to the speed or the vibration theory. So I take it that Theophrastus is referring to a ποσότης theory which focused attention on the διάστημα, and is distinguishable both from the (‘Pythagorean’) ratio theory and from the speed (and the vibration) theory. A possible candidate is Aristoxenus, who in *El. Harm.* I (15.25 = dR 21.1ff.) defines the διάστημα ὡς τύπῳ εἶπεῖν as a διαφορὰ τάσεων καὶ τόπος δεκτικός φθόγγων ὀξυτέρων μὲν τῆς βαρυτέρας τῶν ὀριζουσῶν τὸ διάστημα τάσεων, βαρυτέρων δὲ τῆς ὀξυτέρας. Now, a τόπος has a certain extension, that is: the space between two τάσεις must have a certain μέγεθος (cf. *El. Harm.* 16.22 = dR 21.19: πρώτη μὲν οὖν ἐστὶ διαστημάτων διαίρεσις καθ’ ἣν μεγέθει ἀλλήλων διαφέρει).⁴⁰ Talking about intervals as having ‘magnitude’ remains, however, an empty metaphor and suffers from circularity, unless one is (as Aristoxenus says he is not) prepared to acknowledge that there is a uniform unit (i.e., a smallest *diesis*) by which different magnitudes can be measured—which, of course, would make differences in μέγεθος into differences in πλῆθος:⁴¹ cf. Ptolemy 20.19f.: “And if we enquire after the magnitude of the difference in question, they [i.e., the Aristoxenians] do not explain even this without reference to another, but would say, perhaps, that it is two of those of which the fourth is five, and that this again is five of those of which the octave is twelve, and similarly for the rest, until they come back round to saying ‘... of which the tone is two’” (transl. Barker).⁴² So Aristoxenus’ using the concept of μέγεθος while at the

⁴⁰ Cf. 6.6 (= dR 10.14): τάς τε κατὰ μέγεθος αὐτῶν (sc. τῶν συστημάτων) ἀποδιδόντας διαφορὰς καὶ τῶν μεγεθῶν ἐκάστου. Also 21.22 (= dR 27.15): ἔστι δὲ τόνος ἡ τῶν πρώτων συμφώνων κατὰ μέγεθος διαφορὰ and 46.1 (dR 57.1–2): τόνος δ’ ἐστὶν ᾧ τὸ διὰ πέντε τοῦ διὰ τεσσάρων μείζον. See Barker’s note (1989, 140 n. 80).

⁴¹ Cf. expressions like πλῆθος ἐπὶ τὰς ἡμερέων ὁδοῦ, Hdt. 4.123 and Aristot. *Met.* 1057a3–4: ἀριθμὸς πλῆθος ἐνὶ μετρητόν.

⁴² Barker (1989, 294 n. 83): “He (i.e., Aristoxenus) would find nothing objectionable in the apparent circularity to which Ptolemy points: all terms in the science must

same time maintaining that the μέγεθος cannot be measured makes his theory vulnerable to Theophrastus' line of attack in 17–19. The cautionary phrase (ὥς τύφω εἰπεῖν) with which Aristoxenus introduces his definition of the διάστημα and the fact that he seems to anticipate reproaches about a lack of accuracy (δεῖ δ' ἕκαστον τούτων εὖ πῶς ἐκλαμβάνειν πειρᾶσθαι τὸν ἀκούοντα μὴ παρατηροῦντα τὸν ἀποδιδόμενον λόγον ἑκάστου αὐτῶν εἴτ' ἐστὶν ἀκριβὴς εἴτε καὶ τυπωδέστερος, ἀλλ' αὐτὸν συμπροθυμούμενον κατανοῆσαι κ.τ.λ. 16.1 = 21.7ff. dR) may indicate that he was conscious of this. Cf. p. 137 *infra*.

17–20. καὶ γὰρ εἰ . . . ἀριθμοῦ: The argument goes as follows: if 1) the interval between two different notes is to be defined as a numerable quantity (πληθος) and 2) μέλος arises from different notes, then the differences which cause melody will be differences in number. Hence, melody is “nothing but number” (because the differences which produce melody are nothing but differences in number), which, again, entails that everything numerable will “participate in melody.”

18. πληθος: I have consistently translated “numerable quantity” (rather than ‘quantity,’ ‘number’ or ‘plurality’) in order to distinguish πληθος from ἀριθμός (‘number’), ποσότης (‘quantity’) and μέγεθος (‘magnitude’).

19–20. ἀλλ(ὰ) ... ἀριθμοῦ: The last sentence of this paragraph, by recapitulating the (absurd) implication both of (Pythagorean) ratio theory and of (Aristoxenian?) πληθος theory, ends the first phase of Theophrastus' attack on ποσότης theory.

21–31. *If a note is one thing and the quantity that goes with it an other, then heavy and sharp notes differ from one another either as notes or as different in quantity. If, as the speed theory and the vibration theory have it, the latter applies, then differences of pitch between notes are due to differences in quantity; so, again—since it is impossible for something to be a sound without at the same time having a certain pitch—sound will be nothing but number.*

be defined ultimately by reference to one another and to what is recognised through perception, not to something extrinsic to the harmonic domain.”

21. εἰ δέ introduces a new assumption which is to be distinguished from those discussed so far: if numerable quantity is an *attribute* of notes, then a note is one thing, its numerable quantity an other. This leads to a dilemma: if a note *qua* being heard is something different from the περὶ αὐτὸν πλῆθος, then the heavier and the sharper note differ from one another *either* as notes *or* as different in πλῆθος. If 1) the latter applies, and 2) the sharper note is as it is “by having a more-numbered movement,” then πλῆθος is the only possible candidate for determining the ἴδιον τῆς φωνῆς, since the πλῆθος of every sound (φωνή) has to be greater or smaller than that of any other sound. Hence, difference between φωναί, again, would amount to difference in number.

21. **συμβέβηκοι**: Schneider, Düring and FHS&G read συμβέβηκε, presumably because what is stated in the protasis will turn out to be the view of Theophrastus himself.⁴³ But for the time being it is just another hypothesis to be discussed, which, as such, leaves room for two different interpretations: the heavier and the sharper note differ from one another *either* as notes *or* as different in numerable quantity (24). Only after having rejected the latter alternative Theophrastus will make it clear that he himself prefers the view that it is *qua* notes that sharp and heavy notes differ from one another (line 32–33).

23. ἡ ἀκουστός: The transmitted ἡ can easily be explained as due to a misreading of ᾗ, which gives us an understandable text. The expression φθόγγος ᾗ ἀκουστός fits into the ‘empiricist’ tradition which seeks to describe a musical datum in autonomously musical terms without having recourse to concepts drawn from mathematics or physics.

23. **καὶ ὁ βαρύτερος καὶ ὁ ὀξύτερος**: The first καὶ may seem otiose. It is, however, not without some importance (cf. 43 *infra*: οἶόν τε γὰρ καὶ ταύτην λέγειν ἢ κάκεινην) for Theophrastus’ argument. The ‘proof’ that both the speed and the vibration theory must be rejected will turn out to rest on the assumption that “nothing can be a note, or even a sound, without having a pitch” (Barker 1989, 113 n. 12). It is difficult to suppress the feeling that the redundancy of Theophrastus’ text (26–28: πᾶσα γὰρ ἀντιληπτικὴ ἢ κατὰ τὸ ὀξύ ἢ κατὰ τὸ βαρὺ

⁴³ There is, of course, nothing against having an optative verb-form in the protasis and an indicative in the apodosis (cf. Düring’s unnecessary conjecture διαφέρει for διαφέρει in line 15).

ἐστι· πᾶσα γὰρ φωνή ἐστὶν ἥς μὲν ὀξύτερα, ἥς δὲ βαρυτέρα, 30: ἡ φωνή δ' εἰ ὀξύτερα τινὸς ἢ βαρυτέρα ἐστὶν) originates with his having realized that it is difficult indeed to prove that the vibration and/or the speed theory amount to making quantity the 'cause' of music: after all, a sound may very well be a sound because of some property common to all sounds, and have its own pitch because of its having a certain 'quantity.' Why, after all, "should not pitch depend on a quantitative determination of something other than sound, such as the velocity of transmission of a movement of the air?" (Barker 1985, 294).

23. **βαρύτερος**: I have translated βαρύς, 'heavy' and ὀξύς, 'sharp' (rather than 'low-pitched' and 'high-pitched') in order to bring out the way Theophrastus occasionally draws on the ambiguities of these words.

25. **πλείονας ἀριθμοὺς κεκινήσθαι**: The expression that the sharper note is such as it is "by having a more-numbered movement"⁴⁴ 1) cannot refer to the Pythagorean theory; 2) seems to be a peculiar and needlessly enigmatic way to refer to some version (or interpretation)⁴⁵ of the speed theory. Presumably, Theophrastus has expressed himself this way because he wished the following argument to apply, *not only* to the theory which associated pitch-difference with difference in speed *but also* to some version of the vibration theory.⁴⁶ Cf. the phrasing in *Sectio Canonis* (where it is assumed that frequency of impact is respon-

⁴⁴ This is hardly an English expression, but it seemed necessary to keep as closely to the Greek as possible. Cf. Barker 1985, n. 9 ("it is natural to construe *pleious* as meaning not 'greater' [i.e., of higher magnitude] but 'more'"), n. 17, and the translation in FHS&G: "being moved in accordance with more numbers."

⁴⁵ Contra Barker (1989, 112 n. 7): "It seems clear that the shift in his line of criticism at this point [line 21] does not mean that he is turning his fire on a second, distinguishable 'school.' Rather, he is offering his opponents (all those who adopt a ratio-based approach) first one, then another interpretation of their general thesis that pitch differences are differences of quantity."

⁴⁶ Contra Barker 1985, 302: "A search through the Greek sources for yet another independent quantitative account of pitch, capable of fitting [this] designation, would, I am certain, be fruitless." Cf., however, the (at least partial) *recantatio* in Barker 1989, 113 n. 11: "... phrases like the present one (...) presuppose a hypothesis akin to that of 8 Eucl. *Sect. Can.* 148–9, rather than the commoner 'velocity' theory of pitch. But in view of the apparent generality of his attack in this section, it would be odd if he had intended to limit its application, here at least, to just another unusual version of the quantitative style of theory."

sible for a note's perceived pitch):⁴⁷ ἀναγκαῖον τοὺς μὲν ὀξύτερουσ εἶναι, ἐπεὶ περ ἐκ πυκνοτέρων καὶ πλειόνων σύγκεινται κινήσεων, τοὺς δὲ βαρυτέρουσ ἐπεὶ περ ἐξ ἀραιότερων καὶ ἐλασσόνων σύγκεινται κινήσεων: "It follows that some notes must be higher, since they are composed of closer packed and more numerous movements, and others lower, since they are composed of movements more widely spaced and less numerous" (148, transl. Barker 1989, 192).⁴⁸ Cf. line 96ff. *infra*, where the possibility that a heavy note has "a fewer-numbered movement" is explicitly distinguished from the possibility that difference in pitch depends on difference in speed (οὐκ ἂν ἐλάττωσιν κινεῖτο ἀριθμούς . . . ἀλλ' οὐδὲ τάχει) and 64ff. *infra*, where the speed and the vibration theory are taken together.

27. ἀντιληπτική: For the sense "taking hold of -," "impressing itself upon the senses" cf. Cassius Felix, *Probl.* 43.35: καὶ εἰκότως ἀντιληπτικωτέρα ἢ εὐωδία τοῖς πόρρωθεν and Lucr. *DRN* 4.728–29: quippe etenim multo magis haec sunt tenuia textu / quam quae percipiunt oculos uisumque lacessunt.

29–30. τί τὸ ἀπολειπόμενον εἴη ἄλλο τι καθ' ὃ φωνή: Despite the fact that this rhetorical question seems to betray some confidence on the part of Theophrastus it cannot have been difficult for his opponents to provide it with an answer.

30–31. ἔχει τὸ ποσόν: The way Theophrastus expresses himself is remarkable, because his very words betray the weakness of his argument: if one defines sound as, say, a vibration of the air, and difference of pitch as difference of frequency of the vibration, then it will indeed be sound which "has (a certain) quantity." In the same way, other entities can 'have' quantity without thereby depriving sound from its defining characteristic.

31. εἰ δ' ἄλλο τι, οὐκ ἔτι ἔσται φωνή τις: The argument appears

⁴⁷ The introduction to the *Sectio Canonis* is generally considered to be a later addition to the main text; but the authors of *De Audibilibus* (803b34ff.; according to Gottschalk we have to think of Strato) and of (ps.) Aristot. *Probl.* 19.39 were acquainted with the vibration theory. Cf. also p. 134–35 below.

⁴⁸ Cf. B. L. van der Waerden 1943, 195.

to go as follows: “If (as we have been assured repeatedly) a sound⁴⁹ is either sharper or heavier than another sound, then (according to the theory we are discussing) it will be sound which has quantity; hence, if something else possesses quantity, there will no longer be such a thing as sound (φωνή τις), since, in that case, that which makes a sound into a sound will belong also to other entities.”

32–44. *Only if sharp and heavy notes differ from one another qua notes we shall no longer be in need of quantity, the differences between notes being due to the distinctive character of the different notes as such, as is the case with different elementary colours and different elementary flavours. The difference between sharp and heavy notes, then, is not due to quantity. On the contrary: both heavy sounds and sharp notes have their own characteristic magnitude.*

32–33. εἰ δ' ἢ φθόγγοι: This starts the “second leg of the dilemmatic argument” (Barker 1989, 114 n. 14), and brings us to what will turn out to be Theophrastus’ own view.

34. εἶδησις: The term connotes a rather lofty kind of knowledge, matching the kind of truly philosophical knowledge the τινες claim by making the intelligible numbers the ‘causes’ of music. Cf. Arist. *De An.* 402a1–8 (the only time εἶδησις occurs in the *corpus aristotelicum*): τῶν καλῶν καὶ τιμίῶν τὴν εἶδῃσιν ὑπολαμβάνοντες, μᾶλλον δ' ἑτέραν ἑτέρας ἢ κατ' ἀκρίβειαν ἢ τῷ βελτιόνων τε καὶ θαυμασιωτέρων εἶναι, δι' ἀμφοτέρα ταῦτα τὴν τῆς ψυχῆς ἱστορίαν εὐλόγως ἂν ἐν πρώτοις τιθεῖμεν. In Neo-Platonic texts the word is relatively frequent (cf., e.g., Porph. *Sent.* 32: γνώσει καὶ εἰδήσει τοῦ ὄντος, and Iambl. *Protr.* 3).

36. χρῶμα ἀπλοῦν: For the contrast between ‘simple’ or ‘elementary’ colours and colours due to mixture (μικτόν: Arist. *De Sens.* 439b24–25) cf. *De Color.* 791a1ff.: ἀπλὰ τῶν χρωμάτων ἐστὶν ὅσα τοῖς στοιχείοις συνακολουθεῖ, (. . .) τὰ δ' ἄλλα ἐκ τούτων εὐσύνοπτα τῇ μίξει κεραννυμένων ἀλλήλοις γίνεται.⁵⁰

⁴⁹ ἡ φωνή: generic article.

⁵⁰ I do not understand why the translation in FHS&G has “color taken simply as such.”

37–38. ὥσπερ εἰ συμμιγείη ... ἴσφ ἴσον: We have to imagine a sort of ‘experiment’ which involves mixing equal quantities of black and white as ingredients for a mixed colour. Cf. Ar. *Plut.* 1132: κύλικος ἴσον ἴσφ κεκραμένης.

37. ἴσαι γὰρ ἂν εἶεν αἱ ποσότητες: If it is possible to have different elementary colours in equal (ἴσαι) quantities, then the difference between elementary colours cannot be due to their quantity. This way of arguing will become important further on, where Theophrastus will attempt to show that it is possible (and in the case of concordant sounds even necessary) for different musical sounds to have equal magnitude or ἰσότης.

37. ἦ: taken up, not by a second ἦ, but by οὕτως οὐδὲ ... (39).

39–40. οὕτως οὐδὲ γλυκεῖ πικρόν: We may infer from ἦ in line 37 and from οὕτως that Theophrastus is going to offer another instance of what has been illustrated by ὥσπερ εἰ συμμιγείη μέλαν λευκῷ, ἴσφ ἴσον. So we have to supply the condensed expression as follows: “in the same way <the numbers cannot be said to be more> when <one mixed an equal amount of> bitter with <an equal amount of> sweet.” For the association of mixing black and white (being elementary colours) and mixing sweet and bitter (being elementary tastes) cf. Arist. *De Sens.* 442a13: ὥσπερ (. . .) τὰ χρώματα ἐκ λευκοῦ καὶ μέλανος μίξεώς ἐστιν, οὕτως οἱ χυμοὶ ἐκ γλυκέος καὶ πικροῦ.

40. καθ’ ὃ ἐπιτέταται: Plut. *Mor.* 677F: ὁ Ἀχιλλεὺς τὸν Φοίνικα καὶ τὸν Ὀδυσσεά ἐπιτεῖναι κελεύει τὴν κρᾶσιν shows that, in Greek, to ‘intensify’ a mixture means to increase the amount of the strongest ingredient. My translation—or should I say paraphrase?—is based upon the assumption that to “intensify an ingredient” may be taken to be a (somewhat artificial) expression for “to increase the amount of an ingredient in the mixture.” So I take it that “in proportion to its being intensified” is equivalent to “in proportion to its contribution to the strength of the mixture” (cf. 62 *infra*, where Theophrastus uses τὸ ἀνεμείνον for “what is less strong”). I do not understand the translation in FHS&G (“so far as its intensity is concerned”), nor do I agree with Barker (1989, 114) who translates καθ’ ὃ ἐπιτέταται as: “in the area

over which they are spread” (and ἐπ’ ἴσον ἐπιτεταμένον (line 41) as: “equally spread out”).

40–41. ἔστι τὸ πλῆθος ἐπ’ ἴσον ἐπιτεταμένον: The πλῆθος of πικρόν and γλυκύ being ἐπ’ ἴσον ἐπιτεταμένον may have sounded as strange in Greek as the amount of sweet and bitter “being equally intensified” does in English. It may be relevant to remember that ἐπιτείνω, ἐπίτασις, and their opposites ἀνίημι, ἄνεσις, are *termini technici*: cf. Aristoxenus *El. Harm.* 1.10.32 (= dR 15.20ff.): σχεδὸν γὰρ οἷ γε πολλοὶ (as against Aristoxenus himself, who wishes to distinguish the sound itself from the physical means of its production) ἐπίτασιν μὲν ὁξύτητι ταῦτο λέγουσιν, ἄνεσιν δὲ βαρύτητι. For a metaphorical use of ἀνειμένος and ἐπιτεταμένος in an other sphere cf., for instance, Anon. Paris. 11.1: εἴπερ οὖν ἡ ἀνειμένη ὄρεξις μικρὸς ἐστὶ λιμός, ἡ ἐπιτεταμένη βούλιμος ἂν εἴη.

41. κατὰ τὸ ἴδιον: “in accordance with the characteristic property <of each>”: the addition 1) may have to do something with the fact that the concept of ἰδιότης will turn out to play an important role in relation to the differences between sounds; 2) may have been inspired by the fact that, when one mixes bitter with sweet, the striking feature is that one needs a great quantity of sweet in order to compensate for the effect of a relatively small quantity of bitter:⁵¹ we will be less surprised at this rather unusual ‘experiment’ when we realize that, of course, each ingredient has its own properties. FHS&G’s “is equally intense in respect of its own special quality” is difficult to understand.

42–43: οὕτε ἡ βαρεῖα: for those who adopt a ‘quantitivist’ explanation this is, of course, inconceivable; in the γάρ-sentence (οἷόν τε γὰρ καὶ ταύτην λέγειν ἢ κάκεινην) Theophrastus makes it clear that, in his view, there is *a priori* no reason for a heavy sound not to have a “more-numbered movement” than a sharp sound, since heavy sounds as well as sharp sounds have their own characteristic ‘magnitude.’ Cf. what the next paragraph (52–55) has to say about the *auloi*.

⁵¹ Cf. *infra* 62–63: in order to produce equality of power we have to take a greater amount of what is less strong.

45–59. *That heavy notes as well as sharp notes have their own characteristic magnitude can be illustrated by the observation that singers and aulos players need a specific amount of muscle and breath power respectively in order to produce a heavy note as well as in order to produce a sharp one. In the case of the auloi the sharp note requires even less labor. In the case of string instruments the magnitude connected with sharp and heavy notes is equal in two respects.*

45. **δηλον**: Sc. that the heavy φωναί (which, according to the ‘quantitativists’ are to be associated with *lesser* quantities) as well as the sharp φωναί each have their own characteristic magnitude, ἴδιον μέγεθος.⁵²

45–55. The theories based on the assumption that the pitch of a sound depends on the speed with which it is propagated, made no provision for distinguishing the loud from the high-pitched. As the classical statement by Archytas (47 B 1, 1.433.13ff. DK) has it: τὰ μὲν οὖν ποτιπίπτοντα ποτὶ τὰν αἴσθασιν ἃ μὲν ἀπὸ τὰν πλαγῶν ταχὺ παραγίνεται καὶ (ἰσχυρῶς), ὀξέα φαίνεται, τὰ δὲ βραδέως καὶ ἀσθενῶς, βαρέα δοκοῦντι ἡμῖν. At GA 786bff. Aristotle observes that, if this is so, it will not be easy to utter a sound that is both small and low-pitched. He attempts to solve the problem by pointing out that large voices occur when what is moved is a great quantity absolutely, small voices where it is little. A mass of air that is large absolutely, and so when moved generates a loud sound, may be moved by something so strong as to move it easily and quickly, which gives you a high note, or by something too weak too move it quickly, which gives you a low sound. In this way all combinations of pitch and force are possible (cf. Barker 1989, 82 n. 51). Theophrastus’ argument may be directed against this Aristotelian attempt to save the association of high pitch with greater speed: “just as people need a certain power in order to give out a sharp sound, so do they in order to utter a heavy one.” In the case of the *auloi* “this is even more so: for the sharp note requires less labor ... while a heavy note demands even greater force.” So it is not enough that all combinations

⁵² I do not agree with Barker (1985, 295; 1989, 114 n. 17) who reads δηλον δὲ (καὶ) both here and in line 87 as showing that Theophrastus “is offering further arguments against the same quite generalised position”: both times the argument introduced by δηλον δὲ is designed to support an immediately preceding statement.

of pitch and force are possible, since in some cases a greater force is *indispensable* in order to produce a heavy sound.⁵³

45–55. From these observations of the way singers (45–50) and aulos players (50–55) produce sharp and heavy sounds we have to conclude that considerations of μέγεθος cut both ways: one needs a specific amount of (muscle resp. breath) power (βία, δύναμις) *both* in order to produce a heavy sound *and* in order to produce a sharp sound.

48. [διὸ βραχύτερον]: The presence of this phrase here must be due to a *saut du même au même* which has been only partially corrected.

50. †τὸ αὐτῇ εἵκειν†: The transmitted text is incomprehensible. Both ταύτῃ ἔοικεν (proposed by Düring) and τοιαύτης ἔοικεν (proposed by Schneider), when translated, more or less accord with what Theophrastus apparently intended to say. One may, however, doubt whether Düring's ταύτῃ ἔοικεν ... δεῖν is acceptable Greek for “like-wise ... is needed.” Schneider's conjecture (τοιαύτης ἔοικεν ... εἰς τὸ ... δυνάμεως δεῖν καὶ εἰς τὸ ...), apart from producing a rather harsh asyndeton and a superfluous ἔοικεν, requires a dubious interpretation of τοιαύτης (δυνάμεως) as “a comparable *amount of* power.” Moreover, the addition of ‘comparable’ appears to be at odds with the content of the next sentence, where it is stated that, in the case of the *auloi*, the heavy tones require *even more* βία than the sharp ones. I have put daggers in the Greek text and have translated *ad sensum* the text proposed by Düring (and printed in FHS&G).

52–55. καὶ γὰρ δὴ καὶ μᾶλλον ἐν τοῖς ... : The *auloi* provide a particularly clear illustration of the observation that a heavy sound has its own characteristic magnitude, because the quantity (of breath power) the player needs in order to produce a heavy note (contrary to ποσότης theory) is assumed to exceed the quantity one needs for producing a sharp one.

56–57. ἐν δὲ ταῖς χορδαῖς ... παχυτέρα: Here it turns out 1) that, at least in some cases, the ἴδιον μέγεθος of sharp and heavy sounds may be an ἴσον μέγεθος, and 2) that, in the case of strings, an ἴσον μέγεθος is

⁵³ I do not agree with Barker (1989, 114 n. 17) who makes Aristotle in *GA* “partly anticipate” Theophrastus’ argument.

made up of variables which are 1) different from those used in the discussion of singing and flute playing and 2) different from one another, increase of tension going together with decrease of thickness and vice versa.

56. **κατὰ θάτερον**: The *ἰσότης* is evident 1) from the fact that increase of tension goes together with decrease of thickness (and vice versa) and 2) from the fact that the resonance of the sharp note is stronger to the same amount that the resonance of the heavier note spreads around.

57. **†δοκοῦσα†**: There seems to be no convincing way to explain the presence of *δοκοῦσα*. FHS&G translates “the one that *seems* slacker,” which would be surprising, since Theophrastus apparently intends to argue from what is visible to anyone who cares to look at it: when one slackens the tension of a string the string becomes thicker, and vice versa. One would like to interpret *δοκοῦσα* as referring to the ‘judgment’ of the musician who is tuning up his instrument and observes that the slacker string is too low, but the Greek hardly allows this. Another possibility is that *δοκοῦσα* originates with a reader who reckoned with the possibility of an observation error.

57–59. **οὕτω . . . ἦχος**: The concept of *ἦχος* (‘tone’, ‘resonance’) is introduced in order to make it clear that heavy sounds and sharp sounds each have their own characteristic ‘range,’ or ‘radius.’

58. **ὅσῳ . . . τοσῶδε**: Apparently, Theophrastus wished to bring out that the characteristic resonance of the ‘heavy’ note is a natural consequence of its ‘heaviness.’ So, instead of writing *ὅσῳ ἰσχυρότερος ὁ ἐκ τῆς λεπτοτέρας ἦχος, τοσῶδε πλείων καὶ ὁ ἐκ τῆς παχυτέρας τοῦ πέριξ ἦχος, he has expressed himself in an asymmetric way: “to the amount that the *ἦχος* that comes from the thinner string is stronger, the other is heavier: for the bigger (string) produces the tone which (being heavy) also produces a more abundant resonance of its surroundings.”

58. **ὁ ἕτερος**: Although, at first sight, it may seem natural to make *ἕτερος* refer to *ἦχος*, it seems preferable to supply *φθόγγος*: it is the heavier *note* (rather than the heavier *ἦχος*) which gives the more abundant *ἦχος*.

59. ἐκ ... μείζονος: The absence of an article with μείζονος is awkward. At any rate it seems impossible to make μείζονος refer to the φθόγγος (or the ἦχος), since that would result in Theophrastus himself attributing ποσότης to musical notes. Hence I take it that we have to supply χορδῆς.

59. ὁ πλείων καὶ ... ἦχος: It is, of course, not the tone as such which is said to be also πλείων:⁵⁴ Theophrastus' point is that both the heavy and the sharp note have their own μέγεθος, the thicker string producing a tone which is heavier and thereby has also a more abundant resonance *of its immediate surroundings* (τοῦ πέριξ ἦχος), the thinner string producing a tone which is stronger and thereby more capable of travelling away from its origin.

59. τοῦ πέριξ ἦχος: For the use of the genitive for that which is made to resound cf. Aret. SA 1.5: ἦχοι ὥτων (instead of ἐν τοῖς ὥσιν) and expressions such as τὰ χαλκία πληγέντα μακρὸν ἤχει (Plato *Prot.* 329A5). Instances of τὸ πέριξ are the surrounding air and the sounding board of an instrument.

60–73. *The possibility of concordance requires that their be equality of magnitude of the concordant notes, for in order to be perceived as concordant the notes must sound together. According to the speed and the vibration theory this would be impossible, because both theories imply that the magnitude of the sharp note will exceed the magnitude of the heavy one: hence the former will always overpower the latter.*

60ff. πῶς γὰρ ἂν κ.τ.λ.: In the preceding section Theophrastus has set out to demonstrate that both heavy sounds and sharp sounds have their own characteristic magnitude. In the course of the argument (56ff.) it has turned out that it is even possible for the ἴδιον μέγεθος of sharp and heavy notes to be equal. Somewhat unexpectedly the πῶς γὰρ question in 60 turns out to be the start of a new section, which is designed to demonstrate that concordant φθόγγοι even *have to be* equal, because, otherwise, it would be impossible to perceive the phenomenon of συμφωνία (see 74: ἰσότητα δηλοῦν ἀμφοῖν τοῖν φθόγγοιιν). It is

⁵⁴ The word order (ἐκ γὰρ μείζονος ὁ πλείων καὶ τοῦ πέριξ ἦχος instead of ἐκ γὰρ μείζονος καὶ ὁ πλείων τοῦ πέριξ ἦχος) helps to make this clear.

relevant to remember that the proponents of the vibration theory did pay special attention to the acoustic πρόβλημα of συμφωνία: cf. *De Audib.* 804a2ff.: πλεονάκις μὲν γὰρ ἐν πάσαις ταῖς συμφωνίαις ὑπὸ τῶν ὀξυτέρων φθόγγων αἱ τοῦ ἀέρος γίνονται πληγαὶ διὰ τὸ τάχος τῆς κινήσεως· τὸν δὲ τελευταῖον τῶν ἤχων ἅμα συμβαίνει προσπίπτειν ἡμῖν πρὸς τὴν ἀκοὴν καὶ τὸν ἀπὸ τῆς βραδυτέρας γινόμενον. ὥστε . . . ἅμα δοκοῦμεν ἀμφοτέρων τῶν φθόγγων ἀκούειν συνεχῶς and *Probl.* 19.39 (921a23ff.): ἡ γὰρ δεύτερα τῆς νεάτης πληγὴ τοῦ ἀέρος ὑπάτη ἐστίν. τελευτώσαις δ' εἰς ταύτον, οὐ ταύτον ποιούσαις, ἐν καὶ κοινὸν τὸ ἔργον συμβαίνει γίνεσθαι (cf. also *Sectio Canonis* 149). So the vibration theory offered a (new) 'quantitative' solution both to the problem of pitch-difference and to the acoustic problem of συμφωνία.

64. **πλείους κινεῖτο ἀριθμούς:** The expression covers both the vibration theory and the speed theory (cf. *ad* 25 *supra*). In order to understand Theophrastus' argument we have to realize that, according to the vibration theory, difference in frequency accounts for difference in pitch, not, however, for any difference in the speed of the movement of the sound from its origin to those who perceive it. So, if "every movement of the lower string is completed at the same time as one of the higher" (*Probl.* 921a), this may or may not explain συμφωνία, but it does not explain συνήχησις: for συμφωνία to be perceived it is, according to Theophrastus, a *conditio sine qua non* that the 'travelling time' of the two concordant sounds is equal, since in order to be perceived as concordant they must strike the ear at the same time. The argument which starts with καὶ γὰρ εἰ (line 65) is designed to make it clear that, neither the vibration theory nor the speed theory do explain the phenomenon of συνήχησις (65: πῶς ἂν συνήχησις γένοιτο;).

65. **συνήχησις:** The word has been chosen in order to bring out the supposed plus point of Theophrastus theory: one cannot perceive συμφωνία (concordance) without there being συνήχησις ('sounding together').

66–67. **τὴν τῆς κινήσεως ὀξύτητα:** We have to resist the temptation to translate "the speed of the movement": Theophrastus is trading on the common association of speed with ὀξύτης (cf. 71 *infra*: ὁ ὀξύς σφοδρότερος), and he objects, not against explaining the fact that the

high-pitched note is heard at a greater distance by its ὀξύτης as such (cf. *infra* 76), but against explaining it by the ὀξύτης of its movement.

67. [ἡ διὰ τὸ πλῆθος γίνεσθαι]: Probably a marginal gloss by someone who missed a clear reference to ‘quantitivism’ (cf. *ad* 66–67).

68–71. οὐθ’ ὅτε ... οὐθ’ ὅτε ... οὔτε μάλιστα: By spelling out the three impossibilities one can theoretically imagine, Theophrastus, uncharacteristically, indulges in ‘rubbing in’ what is obvious.

68. [αὕτη]: Probably a marginal gloss by someone who looked for a subject to go with γένοιτο and mistakenly found it in κίνησις. Conjecturing οὗτος amounts to correcting the marginal annotation instead of restituting Theophrastus’ text.

68–69. εἴ γ’ ἐν ἀμφοτέροις ἡ συμφωνία: One can, of course, not have concord without having two sounds.

70. λεληθυῖαν: Cf. *ad* 68–71.

70. οὔτε μάλιστα: The translation in FHS&G (“nor, most importantly, when ...”) would require οὔτε μάλιστα ὅτε.

71. ἅτε οἶός τε ὦν: Sc. according to the speed theory.

73. ἀεὶ: In each of the three cases discussed.

74–85. *If sharper notes are apprehended at a greater distance than heavy notes this is due to their being by nature more conspicuous, just as, in the case of colours, white is more conspicuous than any other colour because of its unlikeness to its surroundings. If sharper notes are capable of moving over a greater distance than heavy notes this is due to their respective shapes: sharp tones travel in a forward and upward direction, heavy ones spread more equally round about.*

75. ἰσότης ... τῶν δυνάμεων διαφέρουσα τῇ ιδιότητι ἐκατέρᾳ: Theophrastus comes to the explanation he himself prefers. It may be noted in passing that making the difference between a high-pitched and a low-pitched note dependent upon the ἰδιότης of each, does not provide one with an explanation for the pitch differences

within the *groups* of high- and low-pitched notes without, again, having recourse to some kind of difference in quantity.

75. **τῇ ιδιότητι**: The first aspect of the *ιδιότης* of the sharp note as compared with the heavy one is that the sharp note does ‘stand out more’/‘is more conspicuous’, than the heavy one. This is to account for the fact that the sharp tone can be heard at a greater distance. A further aspect will turn out to be the *σχῆμα* (84).

76. **οὐκ ἰσχυρότερον**: Cf., however, line 58, where the *ῆχος* coming from the thinner string has been said to be *ἰσχυρότερος*.

78. **τῷ θάτερον ἦττον εἶναι ὃ πέφυκε**: The oxymoron is a felicitous expression of the difficulty Theophrastus has with ‘quantitivism’: if one accepts that musical notes are what they are ‘because of quantity’ and the heavier note is heavy by having a lesser quantity, then the heavier note will be “less what it φύσει is.”

82. **καὶ γὰρ δὴ γε, εἰ καί**: An emphatic alternative for *καὶ γὰρ εἰ*: even if one would take it (as the ‘quantitivists’ do) that the sharper note moves over a greater distance, this will not be because of “greater numbers.”

83–84. [**ὁ ὀξύτερος**]: A marginal gloss by a reader who, understandably, looked for a subject to go with *ἐκινεῖτο* and *κινεῖσθαι*.

83. **ἐκινεῖτο**: Although *πορρωτέρω ἐκινεῖτο* is, perhaps, a little awkward, there seems to be no need to accept Wimmer’s *ἐξικνεῖτο*.

84. **σχῆμα**: The difference in shape is what makes sharp notes ‘travel forwards,’ while heavy notes travel ‘equally round about.’ Cf. *De Audib.* 800a3: *τὰς δὲ φωνὰς ἀπάσας συμβαίνει γίνεσθαι καὶ τοῦς ψόφους (...) οὐ τῷ τὸν ἀέρα σχηματίζεσθαι, καθάπερ οἴονται τινες* (Theophrastus?) κ.τ.λ., *Arist. De An.* 420a28ff.: *οὐδ’ ἄνευ ψόφου τὸ ὀξὺ καὶ τὸ βαρὺ. ταῦτα δὲ λέγεται κατὰ μεταφορὰν ἀπὸ τῶν ἀπτῶν (...)* τὸ μὲν γὰρ ὀξὺ οἶον κεντεῖ, τὸ δ’ ἄμβλν οἶον ὠθεῖ, διὰ τὸ κινεῖν τὸ μὲν ἐν ὀλίγῳ, τὸ δὲ ἐν πολλῷ, ὥστε συμβαίνειν τὸ μὲν ταχὺ τὸ δὲ βραδὺ εἶναι, and (from a ‘quantitivist’ context) *Theon Smyrn.* (65.25ff. *Hiller*): *πάλιν γὰρ τὰ μήκη καὶ τὰ πάχη δυσκινήσιαν προσάπτοντα ταῖς χορδαῖς ἀσθένηειαν παρασκευάζει, ὥς μὴ ῥαδίως κινεῖσθαι*

μηδὲ θᾶπτον πλήττειν τε καὶ εἰδοποιεῖν πλείονα ὄντα τὸν πέριξ ἄερα, and 66.6ff.: καὶ γὰρ τῶν ἐν τούτοις (*i.e.*, τοῖς ἐμπνευστοῖς ὄργανοις) φθόγων οἱ βαρύτεροι, διὰ τὸ μῆκος καὶ τὴν ἐυρύτητα τῶν τρημάτων πλέον εἰδοποιοῦντες τὸν ἄερα ἢ νῆ Δία τὴν ἄνεσιν τοῦ πνεύματος.

84–85: The phenomenon referred to is what, in modern physics, is called a difference *qua* ‘deflection.’

86–100. *That sharp notes and heavy notes have different shapes can be substantiated by the fact that certain wind instruments are more resonant round about, and also by the observation that, when touching the ribs of a singer or the sounding board of a string instrument one feels the movement produced by a heavy note more than that produced by a sharp one. The heavy note moves all around to the same degree as the sharp note moves forward. From these phenomena, as well as from the fact that the larger aulos is heavier-pitched than the smaller one, one may conclude that a heavy sound cannot have a fewer-numbered movement than a sharp one. Neither can the sharp sound be different from a heavy one by its speed, for in order to make it possible for two notes to be concordant, they have to be of equal speed.*

86. **δηλον δέ:** Sc. that sharp and heavy notes have different shapes.

86. **τὸ . . . ὑπὸ κέρας:** FHS&G (reading τά): “those with a horn.” Barker may be right (1989, 116 n. 32) in supposing that the expression refers to a ‘bell’ of horn attached to the pipe of a wind instrument. Düring makes κέρας refer to the ‘arms’ of a stringed instrument, which may sometimes have been made from animal horns or ivory,⁵⁵ but the Greek seems not to allow this.

96. **οὐκ ἂν ἐλάττους κινεῖτο ἀριθμούς:** This is supposed to be impossible for the reason that the sharp note moves forward *to the same amount* (ὅσον ... τοσόνδε) as the heavy note moves around. But it goes without saying that any two items may be ‘of equal quantity’ in one

⁵⁵ Cf. Telestes (PMG 808): ἄλλος δ’ ἄλλαν κλαγγὰν εἰς κερατόφωνον ἐρέθειζε μάγαδιν (...). For the evidence we have about soundboxes of stringed instruments see West 1993, 48f.

respect, while being ‘of different quantity’ in an other: a large amount of air may very well be made to vibrate with a low frequency.

96. ὅπερ: Sc. that the heavier note cannot have a “fewer numbered movement.”

98. περὶ ὅ: Sc. the πνεῦμα.

98. οὐδὲ τάχει: The reason for distinguishing the speed theory from the vibration theory (cf. 25 and 64 *supra*, where the two have been taken together) may be that Theophrastus was conscious of the weakness of his argument (cf. *ad* 96): regarding the speed theory he returns to an argument he has used also at 66ff. *supra*.

101–118. *It is then not inequality of numbers that accounts for the differences between sounds, but the sounds being such as they are by nature, their being by nature attuned together accounting for the possibility of sounds being concordant. Nor are the intervals, as Aristoxenus has it, the causes of the differences: the notes themselves are the causes of melody, the intervals are the causes of the unmelodic.*

101–2. αἱ δὲ φύσει τοιαίδε φωναὶ φύσει συνηρμοσμένοι οὔσαι: Here we have Theophrastus’ own theory in a nutshell: it is the φύσις of the notes themselves which are φύσει attuned to each other that accounts for melody being a harmonic sequence of different notes.

102. συνηρμοσμένοι: Although ancient musical theory had much to say on the problem of concordance and discordance of notes, Theophrastus’ discussion of the ιδιότης of the φωναί has not made clear wherein this “attunement of the notes to each other” actually consists.

103. ὥς τινές φασιν: The argument against an analysis in terms of διαστήματα is directed against Aristoxenus.⁵⁶ According to Barker (1985, 308) “this last stretch of polemic is unexpected” because “there

⁵⁶As Barker (1985, 309) observes, “(the argument) does nothing to undermine the (...) Aristoxenian practice of expressing the relations between notes as distances.” See, however, *ad* 17–18 *supra*.

is no doubt that Theophrastus would be on Aristoxenus' side when the latter dismisses the views of those who "reject *aisthēsis* as being inaccurate, inventing 'intelligible' (*noētas*) causes, and saying that it is in certain ratios of numbers and relative velocities that high and low pitch come about" (*El. Harm.* 32.21–26). We have, however, to remember that Porphyry's quotation is taken from a wider context, which probably—so much at least may be gathered from 102–3 and from the last sentence of our text—was devoted to a discussion of various theories about the αἴτια or ἀρχαί of music in general: Theophrastus' polemic is directed, not only against 'quantitivism' (which, of course, at the time was the dominant belief) but also against other rival theories about the "causes of music." So, what may cause surprise is not *Theophrastus'* polemizing against Aristoxenus but rather the fact that *Porphyry*, although he intended to quote Theophrastus' argument against 'quantitivism,' did not leave out this attack on Aristoxenus from his quotation.⁵⁷

103. αἴτια τῶν διαφορῶν: The first occurrence of the concept of αἴτιος in this context. There is, of course, no substantial difference between saying that "the numbers account for the differences which produce music (τὸν τῶν διαφορῶν λόγον ποιοῦσιν)" and saying that "the numbers are αἴτιοι of the differences in music": cf. the opening sentence of the concluding paragraph, where Theophrastus claims to have shown that οὐτ(ε) ... τὰ διαστήματα αἴτια ... οὐθ' οἱ ἀριθμοὶ αἴτιοι ... Cf. next note.

103. διὸ καὶ ἀρχαί: Cf. Aristox. *El. Harm.* 32.21 (dR 41.18ff.), where Aristoxenus dismisses those who invent νοητὰς αἰτίας and announces that he himself will endeavour to adopt ἀρχάς (...) φαινομένης ἀπάσας τοῖς ἐμπείροις μουσικῆς.

104. παραλειπομένων: I have followed Barker 1989, 117 in translating παραλείπω (in lines 104, 113, 114) by 'leave out,' and παραπέμπω (107, 109, 113, 117) by 'reject' (rather than, with FHS&G, 'omit'). Παραπέμπω τι apparently connotes that the rejected item

⁵⁷ I would, then, not agree with Barker 1985, 309: "All it (viz. the argument under discussion) does, and all Theophrastus wishes to do, is to show that such a procedure offers no credible quantitative analysis of pitch."

would be out of place (cf., for instance, Apoll. Dysc.' use of παραπεμπτός for what is 'inadmissible': *Pron.* 31.18), while παραλείπω is the more neutral term for 'leaving out,' 'passing over' something.

106. **ἐπειδή**: Without a preceding comma, since the ἐπειδή-clause contains what made *Aristoxenus* think that the intervals are the causes of melody (cf. ἐπειδή in 103, where the ἐπειδή-clause contains Theophrastus' own reason for denying that the intervals can be regarded as the causes of the διαφοράι).

107–9. **οὐδ' ἄν τι ἄλλο ... παραπεμπόμενον**: I see no possibility for construing the transmitted text. Especially οὐδ' ἄν τι ἄλλο ἐπιστημονικὸν γένοιτο, εἰ μὴ τούναντίον ἀνεπιστήμον τοῦ ἐπιστήμονος causes unsurmountable difficulties, a verbatim translation resulting in something like: "nor can any other thing become knowledgeable unless its opposite, the unknowing of the knowledgeable."⁵⁸ I strongly suspect that we owe the presence in the text both of ἐπιστημονικόν and of ἀνεπιστήμον τοῦ ἐπιστήμονος (twice) to someone (maybe to Theophrastus himself) who wished to elucidate a rather condensed expression by adding an example. My translation (giving in brackets what I suppose to be later additions) attempts to keep to the Greek text without completely suppressing what I suppose to be later additions.

107. **παραπέμποιτο**: Cf. n. *ad* 104 (παραλειπομένων).

108. **εἰ μὴ τούναντίον**: sc. γίνοιτο: that the ἐναντίον of something does not arise is, in itself, not the cause of that something arising.

110–12. One realizes that this implies no less than that, according to Theophrastus, *Aristoxenus* has failed to grasp the (Aristotelian) concept of cause.

⁵⁸ The translation in FHS&G ("and that no other thing would become characterized by knowledge unless the opposite of the knowledgeable, (namely) ignorance, (were omitted). For ignorance is not the cause of the knowledgeable through its existence, but through not preventing it, when it is omitted [...]."), apart from being scarcely comprehensible, has to supply "were omitted" and has to strain the Greek word order by taking οὐδὲ . . . ὥς ὃν αἴτιον as "(is) not the cause *through its existence*."

111. ἅμα ... καί: A pleonastic way of saying ‘as well’: cf. Van Raalte *ad* Theophr. *Met.* 5b3–7. The translation in FHS&G (“if someone were to sing *simultaneously* (my italics) the continuous series of intervening positions as well”) would require a singer who is able to produce several sounds at the same time.

111. φθέγγοιτο: ‘Utter’, rather than (as FHS&G have it) ‘sing’, since what results is precisely the ‘unmelodic’ series of sounds which distinguishes normal speech from song.

111–12. κατὰ τὸ συνεχὲς καὶ τοὺς μεταξὺ τόπους: Theophrastus is alluding to Aristoxenus, who, at *El. Harm.* 8.19 (13.10 dR)ff., characterizes the difference between song and normal speech by distinguishing two forms of movement: δύο τινὲς εἰσιν ἰδέαι κινήσεως, ἢ τε συνεχὴς καὶ ἡ διαστηματικὴ.

112. οὐκ: After a protasis introduced by εἰ γάρ the transmitted οὖν is, in the apodosis, at least, odd,⁵⁹ the more so because at the beginning of the next sentence we find οὖν once again, this time used in a perfectly normal way. Ἄρ’ οὐκ being just what one would expect (cf. 184.46 FHS&G; Denniston *GP* 46: “ (...) ἄρ’ οὐ definitely forecasts an affirmative reply”) I have ventured to put this in the text.

112. προίτοιτο: We have to be content with ἄν showing up only at the end of the next sentence (γίνοιτο ἄν)—unless, of course, one would be prepared to normalize the text by writing ἄρ’ οὐ(κ ἄν) (*saut du même au même*?) instead of the transmitted ἄρ’ οὖν (cf. preceding note).

114–15. μέγα (...) ὄφελος τὸ περιίστασθαι ταῦτα εἰς τὴν μελωδίαν: Regarding the transmitted ταύταις Barker (1989, 117 n. 42) observes: “Grammatically, ‘these’ can only be the melodic and the unmelodic.”; he translates (as does FHS&G): “it is therefore a great help that melody revolves around these,” viz. the melodic and the unmelodic. It is, however, difficult, if not impossible, to find a parallel for the in-

⁵⁹ Οὖν frequently occurs in a sentence following one with γάρ (as is the case with the second transmitted οὖν in line 112), where the speaker returns from a subsidiary explanation to his principal message. See Sicking and Van Ophuijsen 25 and 93f. For ἄρ’ οὖν elsewhere in Theophrastus cf. 584A207, 223 FHS&G (both from *De Pietate*) and *Met.* 10a16.

terpretation of περιίστασθαι this translation requires. This lends some plausibility to Alexanderson's conjecture ταῦτα εἰς: "it is a great help for (the making of) the melody that these (viz. the notes which are the 'content' of the intervals) are avoided"—the more so because this would make Theophrastus allude to Aristoxenus' use of ἵστασθαι (*passim*: see the Index in dR) for the voice's "coming to rest" on the pitches that belong to a certain ἁρμονία, avoiding the positions that are 'unmelodic'. Admittedly, according to LSJ, περιίστημι c. acc. *go round so as to avoid, shun* occurs only in later Greek—Philod. *De Rhet.* 1.384 S. (π. τὰς ἀμαρτίας) being their earliest example. Perhaps, Theophrastus intended to connote that, when producing melody, the voice is made to rest on the notes which are "around the intervals"?

117. **ὄντες**: From a formal point of view as well as with respect to content we could very well do without this participle.

118. **ἥς καὶ ἀρχαὶ λέγουιντ' ἄν**: Cf. *ad* 103 *supra*.

119–26. *We may rule out then both the intervals and quantity as accounting for the nature of music: only the movement of the soul that occurs with a view to release from the evils due to the emotions can be said to be the nature of music: making quantity or the intervals the cause of music would leave music without any nature whatsoever.*

121. **κατ' ἄλλο**: As at the start of our fragment, Theophrastus seems to have in mind those "quantitativists" who did ascribe "quantity" to the notes themselves instead of those ascribing it (as the great majority of them actually did) to the movement of the sound in a material medium; the latter must have been relatively untroubled by the fact that notes with different pitches in some other respect (κατ' ἄλλο, such as, for instance, length or width of *auloi*) can be observed to be "of equal quantity."

122. **καί**: That both the heavy notes and the sharp ones, apart from the physical characteristics of the instrument which produces them, also do require an equal amount of labour is presented as an extra argument in favour of there being notes of equal quantity.

123–24. εἰς τούναντίον πάλιν: For the pleonastic expression cf., for instance, Men. Fr. 395 Koerte: ἢ πάλιν τάναντία.

125. εἰ μὴ ἦν: That is: if we would have to accept either Aristoxenus' intervals or 'the numbers' as being the 'causes' of music.

125–26. οὐδ' ἂν ἡ τῆς μουσικῆς φύσις ἦν: Cf. Theophr. *Met.* 4a23f.: αὐτὰ (sc. τὰ μαθηματικά) δὲ δι' αὐτῶν οὐδεμίαν ἔχει φύσιν: if the 'numbers' do not have a φύσις of their own, then making the φύσις of music dependent upon the numbers leaves music without any φύσις whatsoever.

III. 'Quality' versus 'Quantity'

1. "A priori dialectical assault" or polemic?

In my commentary (*ad* 17–18, 25, 45–55, 60 ff., 103)⁶⁰ I have argued that Theophrastus distinguishes at least four different attempts to account for the διαφοραί which constitute music:

- a. the time-honoured 'Pythagorean' belief that all properly harmonic intervals gain their musical status because of their mathematical properties;
- b. the speed theory which considered the velocity of a sound's transmission through the air to be what determines its pitch;
- c. the vibration theory, according to which the relative frequency of impacts striking the air is responsible for the perceived phenomenon of higher or lower pitch;
- d. Aristoxenus' approach, being an attempt to do without mathematical or physical data, and considering notes to be points lying on a continuum of pitch, and the relations between them to be intervals, distances of various sizes (μέγεθος) in the dimension of pitch.

My reading of Theophrastus' text, then, differs from the interpretations given by Gottschalk 1968, 450: "Nothing in his (sc. Theophrastus') words suggests that he distinguished various schools of thought among his opponents"; "None of his arguments is directed specifically at the vibration theory") and by Barker (1985, 295): "The arguments constitute an a priori dialectical assault on quantitative analyses of pitch in

⁶⁰ References are to the line numbers of my text.

general. That the focus of the arguments shifts from time to time is not because Theophrastus is turning his fire on distinguishable schools of thought but because he is offering alternative ways of interpreting the original, imprecise slogan that musical differences are differences of quantity. He argues that any theory adopting this slogan as its basis must be in error, whether it conceives differences of pitch as differences of quantity as such, as differences of quantity attached specifically to sounds, or as differences of quantity attached to any other kind of variable."⁶¹

Hopefully, my commentary has made clear why I think it impossible to make sense either of the structure of Theophrastus' argument or of the terminological distinctions he has made without assuming that he intended to distinguish between several different approaches to the problem he is dealing with.

2. *Other Peripatetics on the same subject*

It is not without some importance for our understanding of Theophrastus' text to notice that he was not the only member of the Peripatetic school to take interest in the subject under discussion. Aristotle himself 1) also rejected the Pythagorean belief in its old-fashioned, so to speak 'orthodox' form, and argued against it along much the same lines as Theophrastus does, and 2) made an attempt to solve some difficulties which are tied up with the velocity theory (see commentary *ad* 45–55). Moreover,—if Gottschalk is right, as I believe he is, that *De Audibilibus* must be attributed to Strato—the vibration theory⁶² probably was a relatively recent attempt to account for pitch-differences without getting caught up in the problems posed by the velocity theory.

⁶¹An exception must, of course, be made for the start of the argument, directed at the 'Pythagoreans' and at Plato, and the passage about the Aristoxenian διαστήματα (103ff.): here Barker also agrees that they are directed at specific theories.

⁶²Regarding *De Aud.* I would agree with Barker 1985, 321 n. 13: "The passage in question offers an explanation of the apparent continuity of sounds and of the unified effect of concords but not a deliberately articulated theory of pitch; the author's account of pitch is missing from the passages quoted in our source," together with his n. 14: "It would be a mistake to insist that the correlation of higher pitches with greater frequency was unknown as a datum of experience until it was used in the *Sectio* as the basis of a causal hypothesis. It would then be perfectly appropriate for Theophrastus to allude to the correlation, and to argue that this quantitative feature of a sound's determinants cannot be used, any more than can the others, as evidence to support the claim that pitch is itself a quantitative attribute."

Last but not least there was, of course, Theophrastus' rival Aristoxenus, towards whom Theophrastus finds himself in a rather ambivalent position: he clearly did not agree with the outcome of Aristoxenus' researches, although he must have sympathized with his attempt to find answers to musicological problems without redescribing the characteristic features of music as entities of other sorts (cf. Barker 1989, 123).

2.1. *Theophrastus and Aristoxenus.* If I am right in supposing that not only lines 102ff., but also lines 17ff. of our text refer to Aristoxenus, Theophrastus' argument may very well have bothered the author of *Elementa Harmonica* I: if his definition of the interval as a τόπος with a certain μέγεθος could indeed be said to imply the need of a unit of measurement, he had not succeeded in doing without some form of ποσότης: consequently, the autonomy of the new πραγματεία would be in real danger, and he himself would be exposed to the same criticism which applies to the approaches he rejected.

2.2. It seems to me that some differences between *Elementa Harmonica* Book I and Book II may be due to an attempt by Aristoxenus to make himself less vulnerable to Theophrastus' line of criticism.⁶³

– In *Elementa Harmonica* Book I Aristoxenus sets aside the attempts by others to account for the physical basis of pitch-differences, because he considers them irrelevant: cf. 12.1 (dR 17.4)ff.: μὴ ταραττέωσαν δ' ἡμᾶς αἱ τῶν εἰς κινήσεις ἀγόντων τοὺς φθόγγους δόξαι καὶ καθόλου τὴν φωνὴν κίνησιν εἶναι φασκόντων (...). διαφέρει γὰρ οὐδὲν ἡμῖν τὸ λέγειν ὁμαλότητα κινήσεως ἢ ταυτότητα τὴν τάσιν ἢ εἰ ἄλλο τι τούτων εὐρίσκοιτο γνωριμώτερον ὄνομα, and 12.20 (dR 17.21)ff.: εἰ δὲ κινεῖται μὲν τὴν ὑφ' ἡμῶν λεγομένην κίνησιν, ἐκείνης τῆς κινήσεως τῆς ὑπ' ἐκείνων λεγομένης τὴν κατὰ τάχος διαφορὰν λαμβανούσης, ἡρεμεῖ δὲ πάλιν αὖ τὴν ὑφ' ἡμῶν λεγομένην ἡρεμίαν, σπάντος τοῦ τάχους καὶ λαβόντος μίαν τινὰ καὶ τὴν αὐτὴν ἀγωγὴν, οὐδὲν ἂν ἡμῖν διαφέρει.

In Book II he is much more explicit in emphatically rejecting the approaches he in Book I declared to be just irrelevant: see 32.21 (dR

⁶³ Regarding the relationship between the two books of *El. Harm.* I agree with Barker 1989, 120–21: *El. Harm.* is not the remains of a single work, the opening pages of Book II give the impression of being a new introduction to an independent work, and, although the two books cover much of the same ground, the programme of II is not identical with that proposed in Book I.

41.19)ff.: οἱ μὲν ἀλλοτριολογοῦντες καὶ τὴν μὲν αἴσθησιν ἐκκλίνοντες ὥς οὖσαν οὐκ ἀκριβῆ, νοητὰς δὲ κατασκευάζοντες αἰτίας καὶ φάσκοντες λόγους δέ τινας ἀριθμῶν εἶναι (in *El. Harm.* I Aristoxenus nowhere explicitly refers to the Pythagorean theory) καὶ τάχῃ πρὸς ἄλληλα ἐν οἷς τό τε ὀξύ καὶ τὸ βαρὺ γίγνεται, πάντων ἀλλοτριωτάτους λόγους λέγοντες καὶ ἐναντιωτάτους τοῖς φαινομένοις.

Together, this looks like Aristoxenus wanting to make it as clear as possible that he is not to be associated with the kind of reproaches Theophrastus has made to the ‘quantitativists,’ who considered their explanation to be superior because they discriminated by the ratios of the νοητοὶ ἀριθμοί. And when he contrasts the ἀλλοτριολογοῦντες with others (οἱ δέ) whom he describes as ἀποθεσπίζοντες ἕκαστα ἄνευ αἰτίας καὶ ἀποδείξεως οὐδ’ αὐτὰ τὰ φαινόμενα καλῶς ἐξηριθμηκότες (42.3ff. dR) it seems probable that he wanted his readers to think of Theophrastus.

– In Book I Aristoxenus seeks to define the differences between διαστήματα without having recourse to some (minimal) unit by which to measure their μέγεθος, the ultimate διέσις ‘simply’ being the smallest interval which can be identified as constituting any particular use of interval, and hence being melodically usable. See 14.20 (dR 19.16)ff.: οὐτε (...) ἡ φωνὴ διέσεως τῆς ἐλαχίστης ἔλαττον ἔτι διάστημα δύναται διασαφεῖν οὐδ’ ἡ ἀκοὴ διαισθάνεσθαι ὥστε καὶ ξυνιέναι τί μέρος ἐστὶ εἴτε διέσεως εἴτ’ ἄλλου τινὸς τῶν γνωρίμων διαστημάτων.⁶⁴

In Book II he complains that “many people”—Theophrastus may be among them—have misunderstood him and explicitly denies the relevance of some minimal interval (and, consequently of an interpretation of μέγεθος as a numerable quantity): 46.9 (dR 57.6)ff.: δεῖ δὲ πρῶτον μὲν τοῦτο αὐτὸ μὴ ἀγνοεῖν, ὅτι πολλοὶ ἤδη διήμαρτον ὑπολαβόντες ἡμᾶς λέγειν ὅτι ὁ τόνος εἰς τρία ἴσα διαιρούμενος μελῳδεῖται. συνέβη δ’ αὐτοῖς τοῦτο παρὰ τὸ μὴ κατανοεῖν ὅτι ἕτερόν ἐστι τό τε

⁶⁴ Cf. Barker 1989, 135 n. 50: “This is not to deny that such intervals could be both sounded and detected, but they could not be identified as constituting any particular size of interval, and hence are melodically unusable. (Though Aristoxenus insists that the smallest usable interval is the enharmonic diesis, a quarter-tone, he is perfectly prepared to employ smaller intervals, down to one twelfth of a tone, in his theoretical calculations.)”

λαβεῖν τρίτον μέρος τόνου καὶ τὸ διελόντα εἰς τρία τόνον μελωδεῖν. ἔπειτα ἀπλῶς μὲν οὐθὲν ὑπολαμβάνομεν εἶναι διάστημα ἐλάχιστον. One passage which may have contributed to Theophrastus' "misunderstanding" is 1.21.1 (dR 27.16)ff.: διαιρείσθω δ' εἰς τρεῖς διαιρέσεις· μελωδεῖσθω γὰρ αὐτοῦ τό τε ἡμισυ καὶ τὸ τρίτον μέρος καὶ τὸ τέταρτον· τὰ δὲ τούτων ἐλάττωνα διαστήματα πάντα ἔστω ἀμελῶ—δητὰ: there are three intervals that are "melodically" relevant, any interval smaller than these three being ἀμελῶδητον. Cf. 25.21 (dR 33.3): ἔλαττον διάστημα τοῦ ἐλάχιστου τῶν μελωδουμένων.

Moreover, one of Aristoxenus' motives for introducing in Book II the new concept of δύναμις may have been that he wanted to reduce the importance of the role of μέγεθος. At any rate, he insists upon the importance of his observation that intervals can be of equal μέγεθος and yet have a different δύναμις. See 34.1 (dR 43.10)ff.: μένοντος γὰρ τοῦ μεγέθους συμβαίνει κινεῖσθαι τὰς τῶν φθόγων δυνάμεις. 36.4 (dR 45.10)ff.: ἐπεὶ δ' ἐστὶν οὐκ αὐτάρκη τὰ διαστήματα πρὸς τὴν τῶν φθόγων διάγνωσιν (one remembers Theophrastus taking precisely this to be what Aristoxenus maintained) (πᾶν γάρ, ὡς ἀπλῶς εἰπεῖν, διαστήματος μέγεθος πλειόνων τινῶν δυνάμεων κοινόν ἐστίν) τρίτον ἂν τι μέρος εἴη τῆς ὅλης πραγματείας τὸ περὶ τῶν φθόγων εἰπεῖν ὅσοι τ' εἰσὶ καὶ τίνι γνωρίζονται καὶ πότερον τάσεις τινές εἰσιν, ὥσπερ οἱ πολλοὶ (including, for that matter, Aristoxenus himself in his Book I) ὑπολαμβάνουσιν, ἢ δυνάμεις καὶ αὐτὸ τοῦτο τί ποτ' ἐστὶν ἢ δύναμις.⁶⁵ 40.9 (dR 50.9)ff.: ὅτι δ' οὐδέν ἐστι μέρος τῆς συμπάσης ξυνέσεως τὸ διαισθάνεσθαι τῶν μεγεθῶν αὐτῶν, ἐλέχθη μὲν πως καὶ ἐν ἀρχῇ, ῥάδιον δὲ καὶ ἐκ τῶν ῥηθησομένων συνιδεῖν· οὔτε γὰρ τὰς τῶν τετραχόρδων οὔτε τὰς τῶν φθόγων δυνάμεις οὔτε τὰς τῶν γενῶν διαφορὰς οὔτε, ἀπλῶς εἰπεῖν, τὰς τῶν συνθέτων καὶ τὰς τῶν ἀσυνθέτων διαφορὰς οὔτε τὸ ἀπλοῦν καὶ μεταβολὴν ἔχον, οὔτε τοὺς τῶν μελοποιῶν τρόπος οὔτ' ἄλλο οὐδέν, ὡσαύτως εἰπεῖν, δι' αὐτῶν τῶν μεγεθῶν γίγνεται γνώριμον (cf., again, Theophrastus' criticism). 48.5 (dR 59.14)ff.: ὥσθ' ὅτι μὲν οὐχ οἷόν τ' ἀεὶ τῇ τῶν φθόγων διαφορᾷ τὴν τῶν διαστηματικῶν μεγεθῶν διαφορὰν ἀκολουθεῖν φανερόν (οὐχ οἷόν τ' ἀεὶ leaves one with the question as to what exceptions Aristoxenus has in mind).

⁶⁵ Cf. Barker 1989, 153 n. 26: "In what survives of this work Aristoxenus does not fulfil his undertaking to explain 'just what a function is'."

Especially the difference between 1.7.7 (dR 11.19)ff. (ἐπειδὴ περ οὐκ αὐτάρκη τὰ διαστήματα πρὸς τὴν τῶν φθόγγων διάγνωσιν) and 2.36.4 (dR 45.10)ff. (ἐπεὶ δ' ἐστὶν οὐκ αὐτάρκη τὰ διαστήματα πρὸς τὴν τῶν φθόγγων διάγνωσιν—πᾶν γάρ, ὥς ἀπλῶς εἰπεῖν, διαστήματος μέγεθος πλειόνων τινῶν δυνάμεων κοινόν ἐστιν—τρίτον ἂν τι μέρος εἴη τῆς ὅλης πραγματείας τὸ περὶ τῶν φθόγγων εἰπεῖν ὅσοι τ' εἰσὶ καὶ τίνι γνωρίζονται καὶ πότερον τάσεις τινές εἰσιν, ὥσπερ οἱ πολλοὶ ὑπολαμβάνουσιν, ἢ δυνάμεις) may be due to Aristoxenus' having read in the mean time Theophrastus' argument about the διαστήματα not being the “causes” of melody, and using the new concept of δύναμις to make it as clear as possible that διαστήματα and τάσεις *as such* cannot account for all the differences which are relevant to the scientific understanding of music.

Together, these divergences of Book II from Book I give some ground for the hypothesis that at least one of the motives of the tireless and opiniated Aristoxenus for writing a new version of his πραγματεία was that he wished to make it invulnerable to Theophrastus' criticism. In doing so he introduced the new concept of δύναμις which enabled him to explain that—to express myself in the modern way—the interval between, say, C and G may have the same ‘magnitude’ whenever it occurs, but that the ‘functions’ of C and G may be different according to the scale or key of the melody at hand.

3. *An assessment of Theophrastus' argument*

When one tries to assess Theophrastus' contribution to the ancient theory of music, the final verdict has to be that his argument provides us with a classic example of throwing out the baby with the bathwater: his lack of sympathy with ‘quantitivism’ made him dismiss the answers his predecessors and colleagues had found to a couple of questions in the field of musical and acoustic theory. Since the days of Pythagoras himself, the observation that two sections of a string giving notes an octave apart are in the ratio 2:1, and that this ratio conceals a structure of two lesser concords, the fifth of 3:2 and the fourth of 4:3, the study of harmonics had been “part of a much larger enterprise, designed to show how the same principles [of musical harmony] govern ‘harmonious’ relations between the elements of all significant structures in the cosmos” (Barker 1989, 8), and to apply these same principles to the order to which the human soul has to aspire. As may be gathered from the last sentence of 716 FHS&G and from 719–20, Theophrastus resembled

Aristotle in having little or no sympathy with those who wanted music to contribute to virtue because it would enhance the “harmony of the soul.”

It cannot, however, be denied that the observation which gave Pythagorean speculation about the universe and the human soul much of its appeal, is correct, and helps one to explain the nature of musical differences. One has only to understand (as most ancient theorists actually did) that the audible sounds are not *themselves* quantities, and to identify a quantitative physical variable as that which determines a sound's pitch: we have to “‘re-identify’ the entities under discussion, perceived in the guise of notes, as movements in a material medium” (Barker 1989, 8), and to attach the quantitative characteristics to these movements.

This is precisely what many ancient theorists in the field of musical theory set out to do—most of them identifying the relevant physical variable as the velocity of a sound's transmission through the air. This had long been seen to pose thorny questions, and, not long before Theophrastus, an anonymous theorist came up with the possibility that pitch-differences could be due to differences in frequency of the impacts producing the sound and resulting in difference of frequency of vibration of the air. Even without having recourse to the modern explanation of pitch and volume—which associates difference of pitch with different frequency of vibration, and difference of volume with different amplitude of the vibration—one cannot help being surprised that Theophrastus refused to see that there is nothing against defining sound as a movement of the air and ascribing pitch-difference to difference of frequency of vibration of the moving air. This is the more surprising because the vibration theory at the same time made it possible to distinguish pitch from speed of propagation,⁶⁶ and contributes to one's understanding of the phenomenon of concordance. Obviously, Theophrastus so much abhorred ‘quantitivism’ that, to him, the vibration theory was nothing but just another version of this doctrine, reintroducing in a different disguise the belief that pitch-difference is due to ποσότης.

This failure to recognize scientific progress where it was to be found is reflected in the argument of 716 FHS&G—the attempt to refute

⁶⁶ No one among the theorists known to Theophrastus seems to have realized that the speed of sound is always the same.

'quantitivism' in its more primitive forms (and to refute Aristoxenus, for that matter) being more successful than the resistance against the (combined forces of) the velocity and the vibration theory: for his attack at the latter Theophrastus has to rely on the doubtful equation of sound "having a certain quantity" and sound "*being nothing but* quantity" (§3 of our text), and on treating different kinds of 'magnitude' (speed, force, length, width, thickness, tension) as if they were convertible: just by being, for instance, of equal force, two sounds are supposed "to be equal" (to have ἰσότης) and thereby unable to be unequal with respect to some other quantitative variable (the latter way of arguing is introduced in §4 and extensively used in §§5, 7 and 8).

4. Theophrastus' own view

Theophrastus is very explicit about his belief that all theories which did attempt to provide a basis for the analysis of differences of pitch in quantitative terms are to be rejected, but he is much less explicit about the analysis he himself would offer. It seems, however, "fair to assume (...) that he intended to treat high- and low-pitched sounds as differing in quality" (Barker 1985, 310): "It is (...) not certain numbers that by being inequal account for the differences, but the sounds being such as they are by nature being by nature attuned together" (lines 101–2). It is the ἰδιότης of the higher sound which makes it stand out more clearly against its perceptual environment and thereby enables it to be apprehended at a greater distance than the low sound (76–77, 81–82). If the high-pitched note moves over a greater distance than the low one, "this is (...) because of its shape, since the sharp tone travels more forwards and upwards, the heavy one more equally round about" (84–85).

This can hardly be said to be a full-fledged theory, nor can the word σνηρημοσμέναι (line 102) on its own be said to solve the acoustic problem of concordance. Theophrastus seems to have taken his chief inspiration from the connotations of the Greek words ὀξύς and βαρύς—the "sharp" sound being apt to move in a forward direction, the heavy sound to move round about its origin. Although, in order to show that the analyses current in his time were false, Theophrastus, of course, strictly had no need to replace the discarded theories with one of his own, one must confess that Aristoxenus had a certain right to complain about an opponent who limited himself to "oracular utterances on individual topics, without giving explanations or demonstrations, and without even

properly enumerating the perceptual data" (*El. Harm.* 32.29 = dR 42.3ff., transl. Barker 1989, 149).

However this may be, as far as the evidence goes, one may agree with Barker that, to Theophrastus, the important question about music seems to have been "to find some way of identifying in audible pitch sequences qualities that are the same as, or in some way analogous to, qualities of psychic states" (1985, 316–17). One may, however, doubt whether Barker is also right in supposing that the similarity between Theophrastus and Damon extends any further than that they both held melody to be generated by a movement of the soul.⁶⁷ The evidence from 719–26 FHS&G indicates that, according to Theophrastus, music could have some kind of "healing" power rather than that he related, like Damon did, the character of music primarily to the *moral* condition of the soul of either the musician himself or of those listening to his music. I would incline to compare Theophrastus' beliefs about the effect of music not with those of Damon, but with what Aristotle in a famous passage from his *Politics* (1341b32ff.) has to say about the ability of at least some kinds of music to effectuate a *ιατρεία καὶ κάθαρσις*. This would accord with

- 719A FHS&G: *λυπή, ἡδονή* and *ἐνθουσιασμός* are the three *ἀρχαί* of music (cf. Aristotle's *ἔλεος, φόβος* and *ἐνθουσιασμός*);
- 720 FHS&G: only in the case of children music contributes to *ἀρετή*, while, with others, it may even contribute to *ἀκολασία*;
- 721A FHS&G: "it is unreasonable (*ἄλογον*) that music does not at all move and rhythmicize souls" (*ἄλογον τὸ μὴ κ[ε]ινεῖν ὅλως καὶ ῥυθμίζειν τὰς ψυχὰς τὴν μουσικὴν*)—the phrasing indicates that Theophrastus was prepared to acknowledge some justification for this belief, rather than that he himself believed this to be the principal function of music;
- 723 FHS&G: "Music is something proper exclusively to the soul, not the body, and it distracts the soul from attending to its welfare, just as the pleasure of food and drink is something proper exclusively to the body, not the soul" and 724: "Had any degree of virtue been associated with listening (to music), deer would have acquired thereby a share of virtue, since they are fond of the sounds of musical instruments" (both from *Depository of Wisdom Literature*);
- Theophrastus' belief (726A FHS&G) that "music cures many of the ills that affect the soul and the body (*πολλὰ τῶν ἐπὶ ψυχὴν καὶ σῶμα γιγνομένων παθῶν ἱατρεύειν*), such as fainting, fright and prolonged

⁶⁷ Cf. Athen. 628C = 37 B 6 DK: οὐ κακῶς ἔλεγον οἱ περὶ Δάμωνα τὸν Ἀθηναῖον ὅτι καὶ τὰς ψυχὰς καὶ τὰς ὀρχήσεις ἀνάγκη γίνεσθαι κινουμένης πως τῆς ψυχῆς.

disturbances of mind" and sciatica (726B, C). Cf. Arist. *loc. cit.* about *ιατρεία, τῆς συντονίας ἀνάπαυσις, κουφίζεσθαι*).

So, if there is a "Damonian connection" (Barker 1985, 319), it looks like being a rather slight one—Theophrastus apparently having little or no affinity with Damon's (and Plato's) belief that music has an important role to play in the process of educating the human soul to ἀρετή. It even seems probable that his obvious wish to demolish once and for all each and every form of 'quantitivism' has been partly inspired by his lack of sympathy with the beliefs about the human soul that went with it.

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7

Le début d'une physique: Ordre, extension et nature des fragments 142–144 A/B de Théophraste¹

André Laks

I.

Le commentaire de Simplicius au premier chapitre de la *Physique* d'Aristote comporte trois mentions de Théophraste, dont une brève référence (142 FHS&G) et deux citations textuelles (143 et 144B). Nous possédons en outre une paraphrase de la seconde citation dans la partie correspondante du commentaire de Philopon (144A). Nous avons toutes les raisons de penser que ces quatre passages dérivent du I^{er} livre de la *Physique* de Théophraste. Si 144A mentionne seulement le titre général de l'ouvrage de Théophraste ("dans son propre traité physique"), 144B précise "au début de ses livres physiques."² La citation de

¹ Manuscrit remis eu Septembre 1994. J'ai grandement bénéficié des remarques de Catherine Dalimier (dont j'ai aussi pu consulter la traduction du livre I du commentaire de Simplicius à la *Physique* d'Aristote), Silvia Fazzo, Frans A. J. de Haas (sur le passage de Philopon), Jan M. van Ophuijsen (dont la lecture très attentive m'a évité plusieurs erreurs), et de Robert W. Sharples (qui m'a en particulier indiqué dans quelle direction l'analyse des passages relatifs à Alexandre pourrait être approfondie).

² Respectivement ἐν τῇ ἰδίᾳ περὶ φύσεως πραγματείᾳ, Philop. 4.9 et ἐν ἀρχῇ τῶν αὐτοῦ Φυσικῶν, Simpl. 9.7.

Théophraste, en 143, est introduite par la mention moins précise, mais en l'occurrence parfaitement adéquate (puisque l'extrait, comme nous le verrons dans un instant, suivait sans doute 144 A/B), "dans le premier livre de ses traités physiques."³ Le contenu corrobore ces indications. 144A/B concerne en effet le paragraphe initial du traité d'Aristote (*Phys.*, 184a10–16), qui assigne pour première tâche à la science physique de déterminer quels en sont les principes; 142 et 143 portent sur la suite immédiate (184a16–b14), qui introduit la distinction entre "ce qui est plus connu pour nous" et "ce qui est plus connu par nature." Les éditeurs ont mis 142/143 en tête, sans doute parce que, énonçant des propositions méthodologiques sur le statut de l'enquête physique, ils peuvent sembler poser les préalables, alors que 144A/B mettent déjà en jeu des propositions physiques particulières. Mais ceci peut avoir été un effet de l'exégèse de Théophraste, fortement marquée, comme nous le verrons plus loin, par une tendance systématisante. A condition d'inverser l'ordre adopté par les éditeurs (c'est-à-dire d'admettre que le fragment cité dans 144 B précédait dans l'original celui que rapporte 143), l'ensemble offre les linéaments d'un commentaire continu de la première page de la *Physique* d'Aristote.⁴ L'analyse qui suit tente d'en restituer les traits saillants.

II.

La *Physique* d'Aristote s'ouvre sur une justification de la démarche à suivre en matière de science naturelle:

"Puisque la connaissance et la science résultent, dans toutes les procédures dont il existe des principes, des causes ou des éléments, de ce que l'on prend connaissance de ceux-ci (en effet nous pensons savoir chaque chose quand nous en connaissons les causes premières, les principes premiers et jusqu'aux éléments), il est évident que, s'agissant de la science portant sur la nature aussi, il faut d'abord tenter de définir ce qu'il en est des principes."⁵

³ ἐν πρώτῳ Φυσικῶν, Simpl. 20.20.

⁴ Nous savons que d'autres livres de la *Physique* de Théophraste (notamment IV et V, sur l'âme, dont les fragments sont rassemblés et commentés par E. Barbotin, *La théorie aristotélicienne de l'intellect d'après Théophraste* [Paris 1954]) présentaient un caractère exégétique marqué.

⁵ Ἐπειδὴ τὸ εἰδέναι καὶ τὸ ἐπίστασθαι συμβαίνει περὶ πάσας τὰς μεθόδους ὧν εἰσὶν ἀρχαὶ ἢ αἰτία ἢ στοιχεῖα, ἐκ τοῦ ταῦτα γνωρίζειν (τότε γὰρ οἰόμεθα γινώσκειν ἕκαστον, ὅταν τὰ αἰτία γνωρίσωμεν τὰ πρῶτα καὶ τὰς ἀρχὰς τὰς πρώτας καὶ μέχρι τῶν στοιχείων), δῆλον ὅτι καὶ τῆς περὶ φύσεως ἐπιστήμης πειρατέον διορίσασθαι

Selon le début proprement dit du commentaire de Simplicius (*ad* 184a10–16), dont 144 est extrait, Théophraste jugeait l'argument elliptique et avait entrepris d'en restituer la forme complète:

“L'introduction énonce immédiatement le but de l'ouvrage, à savoir qu'il porte sur les principes naturels; il faut en effet, dit-il (*sc.* Aristote), d'abord tenter de définir ce qu'il en est des principes naturels. Et il a aussi indiqué la nécessité du recours au développement sur les principes en argumentant à peu près de la sorte: 'les objets naturels ont des principes; il se trouve qu'on connaît ce qui possède des principes par la connaissance de leurs principes; il se trouve donc qu'on connaît les objets naturels par la connaissance de leurs principes. La connaissance des principes naturels est donc nécessaire pour qui doit posséder la science physique'. Cependant, qu'il existe des principes des objets naturels, l'ensemble du développement qui suit le montrera et ne requiert pas présentement de démonstration. C'est pourquoi, me semble-t-il, il a quant à lui omis cette prémisse. Néanmoins Théophraste, au début de ses propres livres physiques, a également démontré cette dernière: 'L'existence de principes des objets naturels suit manifestement de ce que les corps naturels sont composés, et que tout composé a pour principe ce dont il est composé. Car tout ce qui est par nature ou bien est un corps ou du moins possède un corps; or l'une et l'autre (sorte d'entité) sont composées.' ”⁶

Bien que Simplicius ne donne pas d'indications explicites sur ce point, le supplément de Théophraste semble bien reposer une lecture idiosyncrasique de la première phrase de la *Physique*, et plus précisément de la relative “(les procédures) dont il existe des principes, des causes ou des éléments.”⁷ En principe, une proposition relative peut

πρῶτον τὰ περὶ τὰς ἀρχάς, 184a10–16. Je me suis librement inspiré d'une traduction inédite de la *Physique* par P. Pellegrin. Le texte est celui de W. D. Ross (*Aristotle's Physics* [Oxford 1955]), à une virgule près (*cf. infra* n. 12).

⁶ 8.32–9.10: Τὸ προοίμιον εὐθὺς τὸν σκοπὸν ἐκφαίνει τοῦ συγγραμματος, ὅτι περὶ τῶν φυσικῶν ἀρχῶν ἐστὶ· πειρατέον γάρ, φησί, πρῶτον διορίσασθαι τὰ περὶ τὰς φυσικὰς ἀρχάς· καὶ τὴν ἀναγκαίαν δὲ χρεῖαν τοῦ περὶ τῶν ἀρχῶν λόγου σαφῶς παρέδειξεν οὕτω πως συλλογισάμενος· τὰ φυσικὰ ἀρχὰς ἔχει· τὰ ἀρχὰς ἔχοντα ἐπίστασθαι συμβαίνει ἐκ τοῦ τὰς ἀρχὰς αὐτῶν γνωρίζειν· τὰ ἄρα φυσικὰ ἐπίστασθαι συμβαίνει ἐκ τοῦ τὰς ἀρχὰς αὐτῶν γνωρίζειν· ἀναγκαῖα ἄρα τῷ φυσιολογικῇ ἐπιστήμῃ ἐξόντι ἢ τῶν ἀρχῶν τῶν φυσικῶν γνῶσις· ἀλλ' ὅτι μὲν εἰσὶν ἀρχαὶ τῶν φυσικῶν, ἐφεξῆς ἅπας ὁ λόγος δείξει καὶ οὐ δεῖται νῦν ἀποδείξαι· διὸ οἶμαι ταύτην αὐτὸς τὴν πρότασιν παρήκεν· ὁ μὲντοι Θεόφραστος ἐν ἀρχῇ τῶν ἑαυτοῦ Φυσικῶν καὶ ταύτην ἀπέδειξε λέγων “τὸ μὲντοι τῶν φυσικῶν ἀρχὰς εἶναι δῆλον ἐκ τοῦ τὰ μὲν φυσικὰ σώματα εἶναι σύνθετα, πᾶν δὲ σύνθετον ἀρχὰς ἔχειν τὰ ἐξ ὧν σύγκεται· ἅπαν γὰρ τὸ φύσει ἢ σῶμά ἐστιν ἢ ἔχει γε σῶμα· ἄμφω δὲ σύνθετα.”

⁷ Les principes de la discipline se confondent avec les ceux des objets sur lesquels elle porte. Le glissement est naturel en grec et ne soulève aucune difficulté (*cf.* A. Laks et G. Most, Théophraste, *Métaphysique* [Paris 1993] 25s. n. 5).

avoir une valeur définitionnelle, ou une valeur limitative. Un développement postérieur dans le commentaire du même lemme montre que les Anciens étaient conscients, sinon de la distinction théorique, du moins de la possibilité d'analyser la phrase en question de deux façons. Simplicius s'interroge en effet:

“Mais comment expliquer qu'après avoir dit ‘la connaissance et la science résultent dans toutes les procédures,’ il poursuive ‘dont il existe des principes, des causes ou des éléments’?”⁸

Sa propre réponse (qui est aussi très vraisemblablement celle d'Alexandre)⁹ est que l'ajout vise “une propriété de tous les savoirs scientifiques.”

“Car,” précise-t-il, “la science, étant un raisonnement démonstratif, procède en tous les cas de principes qui sont des prémisses immédiates.”¹⁰

C'est pourquoi, se ralliant à la définition qu'Alexandre avait donnée du terme “procédure” (*methodos*) comme:

“toute disposition théorique qui examine ce qui relève de sa compétence en fournissant la raison, c'est-à dire la cause, ou, ce qui revient au même, une progression conforme à une certaine démarche bien réglée vers l'objet de la connaissance,”

il conclut:

“il est manifeste que la connaissance des principes ne saurait être une procédure, mais seule la connaissance scientifique, elle qui s'effectue à partir des principes et causes des objets de la connaissance.”¹¹

Cette interprétation ‘définitionnelle’ de la relative repose sur la dissociation de l'adjectif “toutes,” dans “toutes les recherches,” de la détermination “qui comportent ...,” de sorte que le syntagme “toutes les

⁸ 13.14–16 (texte cité *infra*, n. 10).

⁹ Voir *infra*, n. 13.

¹⁰ 13.14–18: Ἀλλὰ πῶς εἰπὼν τὸ εἰδέναι καὶ τὸ ἐπίστασθαι συμβαίνει περὶ πάσας τὰς μεθόδους ἐπηγάγεν ὧν εἰσιν ἀρχαὶ ἢ αἰτία ἢ στοιχεῖα; ἢ ὡς ἴδιον πασῶν τῶν ἐπιστημονικῶν εἰδήσεων τοῦτο προσέθηκεν. ἢ γὰρ ἐπιστήμη συλλογισμὸς οὕσα ἀποδεικτικὸς ἐξ ἀρχῶν πάντως ἐστὶ τῶν ἀμέσων προτάσεων.

¹¹ 14.21–25: εἰ γὰρ μέθοδος ἐστίν, ὡς ὁ Ἀλέξανδρός φησιν, πᾶσα ἕξις θεωρητικῆ τῶν ὑφ' αὐτὴν μετὰ λόγου, τοῦτέστι μετὰ αἰτίας, ταῦτόν δὲ εἰπεῖν ἢ μετὰ ὁδοῦ τινος εὐτάκτου πρόοδος ἐπὶ τὸ γνωστόν, δῆλον ὅτι οὐκ ἂν εἴη μέθοδος ἢ τῆς ἀρχῆς γνώσις, ἀλλ' ἢ ἐπιστημονικὴ μόνη ἢ ἀπὸ τῶν ἀρχῶν καὶ αἰτίων τοῦ γνωστοῦ γινομένη.

recherches, qui comportent” devient l'équivalent de “les recherches qui comportent toutes.”¹² Elle s'oppose à une autre, qu'Alexandre avait mentionnée (sans doute sans y souscrire personnellement):

“Il est possible, dit Alexandre, qu'il (= Aristote) entende aussi plus généralement par ‘science’ la connaissance ultime (*epignosis*) des principes, dont il n'existe pas de principes, et qu'il en distingue par contraste la science qui procède à partir des principes.”¹³

Cette interprétation rejoint la précédente dans son résultat, puisqu'il s'agit toujours de distinguer entre deux types de connaissance, la connaissance non médiatisée des principes eux-mêmes et la connaissance médiatisée à *partir de* principes, la seule à être appelée ‘scientifique.’ Mais la manière d'y parvenir diffère. Alors que, dans le premier cas, la relative énonce ce qui est propre, et donc coextensif, aux ‘procédures’ en question—le terme de ‘procédure’ étant pris dans le

¹² C'est cette dissociation qu'est chargée d'effectuer la virgule placée après μεθόδους dans les éditions modernes de la *Physique*. L'idée qu'une ambiguïté peut être résolue par une ponctuation est attestée dès Aristote, *Rhétorique*, 3.5, 1407b18. Mais l'utilisation de la virgule pour distinguer grammaticalement les deux types d'incidentes, “explicative” et “déterminative” (une distinction inconnue de l'Antiquité) n'apparaît pas avant le XVIIIe siècle, dans le sillage de la Logique de Port-Royal (cf. J.-C. Pariente, *L'analyse du discours à Port-Royal* [Paris 1985] ch. 3, et plus particulièrement 88–95).

¹³ 14.9–11: Δύναται δέ, φησὶν ὁ Ἀλέξανδρος, ἐπιστήμην κοινότερον νῦν λέγειν καὶ τὴν τῶν ἀρχῶν ἐπίγνωσιν, ὧν οὐκ εἰσὶν ἀρχαί, καὶ πρὸς ἐκείνην ἀντιδιαίρειν τὴν ἐξ ἀρχῶν ἐπιστήμην. Il me semble que, contrairement à ce que suggère l'édition de Diels (qui fait de 14.9–18 une citation continue), la citation d'Alexandre est ici interrompue par une objection de Simplicius: il faudrait sinon admettre qu'Alexandre ait nié, d'une phrase à l'autre (ὅτι δὲ οὐ ...) ce qu'il vient de positivement reconnaître comme une possibilité (δύναται n'est pas τάχα δὲ ...). On pourrait dès lors penser que la suite, qui développe l'hypothèse retenue par Simplicius, ne doit rien à Alexandre. Cependant, Alexandre doit déjà avoir au moins énoncé, et sans doute avalisé, l'interprétation à laquelle se rallie Simplicius, puisque celle-ci est étroitement solidaire d'une définition du terme *methodos* qui est explicitement attribuée à Alexandre (14.21, cf. *supra*, n. 11). Dans cette mesure, même si le découpage de Diels doit sans doute être raffiné (la citation d'Alexandre pourrait être interrompue par une remarque de Simplicius), il préserve l'essentiel: si la proposition δύναται καὶ ὡς ἴδιον πασῶν τῶν ἐπιστημονικῶν εἰδήσεων τοῦτο εἰρησθαι τὸ ὧν εἰσὶν ἀρχαί ἢ αἰτία ἢ στοιχεῖα· ἢ γὰρ ἐπιστήμη συλλογισμὸς οὐσα ἀποδεικτικὸς ἐξ ἀρχῶν πάντως ἐστὶ τῶν ἀμέσων προτάσεων (14.13–15), remonte à Alexandre, alors la solution de Simplicius, formulée exactement dans les mêmes termes (ἢ ὡς ἴδιον πασῶν τῶν ἐπιστημονικῶν εἰδήσεων τοῦτο προσέθηκεν· ἢ γὰρ ἐπιστήμη συλλογισμὸς οὐσα ἀποδεικτικὸς ἐξ ἀρχῶν πάντως ἐστὶ τῶν ἀμέσων προτάσεων, 13.16–18) est en fait celle d'Alexandre (voir l'apparat critique de Diels *ad* 14.13: *ad verbum fere p. 13,16 tamquam sua protulerat Simplicius, quae hic ex Alexandri disputatione continuat*). Je suis redevable à R. Sharples d'une discussion approfondie sur ce point difficile.

sens restrictif de connaissance scientifique (interprétation définitionnelle de la relative), dans le second, la proposition relative vient au contraire prélever, dans une catégorie générale appelée ‘procédure,’ et qui couvrirait les deux types de connaissance, la démarche discursive qui procède à partir de principes (interprétation limitative de la relative).

Le commentaire de Simplicius ne permet pas de savoir à coup sûr si Théophraste avait déjà discuté le problème en ces termes. Mais il laisse supposer qu’il avait, au moins implicitement, pris position sur la question. L’objection que Théophraste adresse à l’argument d’Aristote montre en effet qu’il optait pour l’interprétation limitative de la proposition relative, celle-là même qu’Alexandre et Simplicius devaient plus tard rejeter:¹⁴ exiger une démonstration de l’existence des principes physiques, c’est en effet supposer que la phrase d’Aristote laisse ouverte la possibilité que l’enquête physique ne fasse *pas* partie de ces “procédures dont il existe des principes, des causes ou des éléments.” Et il faut reconnaître que, à moins de donner d’emblée un sens terminologique précis au mot ‘procédure’/*methodos* (comme le font Alexandre et Simplicius), le ductus de la proposition aristotélicienne suggère fortement cette lecture, comme au reste l’emploi large qu’Aristote fait du terme.¹⁵

On peut en inférer que Théophraste aurait récusé le sens restreint de *methodos*: il fait apparemment partie de ceux qui admettent l’existence de procédures “sans” principes (c’est-à-dire n’opérant pas à partir de principes), à côté d’autres qui “possèdent” des principes. De fait, cet emploi n’est pas moins théophrastéen qu’aristotélicien, si l’on en juge par un passage de l’opuscule *Métaphysique*. Problématisant le statut d’une science des premiers principes, dont on pourrait raisonnablement attendre qu’elle procède ou permette de procéder à la dérivation des entités qui en dépendent,¹⁶ Théophraste remarque à propos de la connaissance des principes:

“Or il se produit le contraire de ce qui a lieu dans les autres procédures. Car dans ces cas-là, ce qui des sciences vient après les principes est plus fort, et pour ainsi dire plus accompli. Mais peut-être cela est-il plausible:

¹⁴ Il n’est donc pas exclu que la première possibilité mentionnée par Alexandre (14.9–11, cité n. 13) se réfère spécifiquement à l’interprétation de Théophraste.

¹⁵ Cf. Aristote, *Phys.* 7.1, 251a7s. (πρὸς τὴν μέθοδον τὴν περὶ τῆς ἀρχῆς τῆς πρώτης), et, pour d’autres références, Bonitz, *Index Aristotelicus*, 451a21ss.

¹⁶ 6a15–18.

car ici la recherche porte sur les principes, tandis que dans les autres (sciences), elle s'effectue à partir des principes."¹⁷

Selon la lecture la plus naturelle du passage, Théophraste inclut au nombre des 'procédures' une enquête portant sur les principes eux-mêmes non moins qu'une enquête prenant son point de départ dans ces principes.¹⁸

On comprend bien, dans ces conditions, que Théophraste ait jugé nécessaire de justifier la conclusion d'Aristote ("il est évident que, s'agissant de la science de la nature aussi, il faut d'abord tenter de définir ce qu'il en est des principes"), en fournissant la démonstration que la science physique fait bien partie des recherches discursives, qui opèrent à partir des principes, et non des recherches qui portent sur les principes eux-mêmes (ou qui y conduisent).

Cependant, même en admettant avec Théophraste que l'argumentation d'Aristote présente une lacune, on pourrait penser qu'il s'agit là d'un simple problème de présentation. C'est l'opinion de Simplicius qui, prenant pour ainsi dire les devants, admet d'emblée que la forme complète de l'argument d'Aristote comporterait trois moments: 1) les choses naturelles ont des principes; 2) on connaît ce qui a des principes quand on connaît ces principes mêmes; 3) on connaît donc les choses naturelles quand on connaît les principes des choses naturelles.¹⁹ Il s'oppose cependant à Théophraste en remarquant que la prémisse initiale, qu'Aristote sous-entend, sera établie par la suite du développement "et ne requiert pas présentement de démonstration."²⁰

¹⁷ συμβαίνει δὲ τοῦναντίον ἢ ἐν ταῖς ἄλλαις μεθόδοις· ἐν ἐκείνοις γὰρ τὰ μετὰ τὰς ἀρχὰς ἰσχυρότερα καὶ οἷον τελεώτερα τῶν ἐπιστημῶν· τάχα δὲ καὶ εὐλόγως· ἔνθα μὲν γὰρ τῶν ἀρχῶν, ἐν δὲ ταῖς λοιπαῖς ἀπὸ τῶν ἀρχῶν ἡ ζήτησις, 6b17–22 (trad. Laks and Most, modifiée en raison des contraintes propres au présent article: nous avons rendu μέθοδος par "disciplines").

¹⁸ Le terme de ζήτησις ("recherche") explique comme cela est possible: car toute recherche, comme toute procédure, comporte un aspect dynamique. Théophraste semble accepter l'idée qu'en ce sens, la recherche des principes puisse être considérée comme une procédure, à la différence d'Alexandre et de Simplicius, pour qui la connaissance des principes suppose une saisie non discursive. Il est vrai qu'une autre lecture du passage est possible: ἄλλαις, dans ἐν ταῖς ἄλλαις μεθόδοις, pourrait en principe être pris non pas au sens inclusif ('dans les autres procédures, au nombre desquelles est comptée la science des premiers principes'), mais exclusif ('dans les autres, qui sont des procédures au sens strict du terme'). Dans ce dernier cas, Théophraste aurait de μέθοδος la même définition qu'Alexandre. Mais une telle lecture paraît forcée.

¹⁹ 9.1–3 (texte cité *supra*, n. 6).

²⁰ 9.5–6 (texte cité *supra*, n. 6).

Autrement dit, l'existence de principes des choses naturelles ne soulève à ses yeux aucun problème particulier: c'est la progression même du traité qui la rend manifeste. Il s'oppose ainsi à la lecture plus pointilleuse de Théophraste, qui refuse de réduire l'ellipse à un problème purement formel. Que les choses naturelles possèdent des principes exige, selon lui, une démonstration préalable, indépendamment de toute "mise en évidence" ultérieure.

La pédanterie est peut-être moins grande qu'il n'y paraît, si l'on admet, avec Théophraste, que l'ultime prémisse du raisonnement aristotélicien est moins la proposition restituée par Simplicius, en vertu de laquelle "les choses naturelles ont des principes," que la proposition qui est au fondement de cette affirmation même, à savoir que "les objets naturels sont des composés" (*suntheta*). C'est en effet de *cette* proposition que Théophraste entend conclure à l'existence des composants (les principes de ces composés) et, par voie de conséquence, à l'existence d'une science physique. Or il s'agit d'une proposition qui n'est nullement triviale, et le désir de Théophraste de lui procurer une assise démonstrative paraît parfaitement légitime.

III.

144B nous conserve le début de cette démonstration. Théophraste y distingue deux catégories d'objets naturels, "ce qui est un corps" (*ē sōma estin*), c'est-à-dire le corps lui-même, et "ce qui a un corps" (*ē echei sōma*), ou, peut-être "ce qu'un corps possède," c'est-à-dire ses propriétés et vertus.²¹ Mais Simplicius ne reproduit ni ne résume les ar-

²¹ Le doute est permis en raison du texte parallèle de Philopon, τὰ φυσικά, φησί, πράγματα ἢ σώματα ἔστιν ἢ ἐν σώματι τὸ εἶναι ἔχει (4.12–13, 144A 5–6). Le premier membre de la disjonction, au nombre près, correspond exactement à la lettre du fragment cité par Simplicius. Mais il en va autrement du second. "Posséder son être dans un corps" n'est pas exactement "avoir un corps." Les exemples donnés par Philopon au cours de sa paraphrase semblent mieux correspondre à la première formulation qu'à la seconde: il est plus plausible de dire de la vue qu'un corps la possède plutôt qu'elle ne possède un corps. On peut lire en ce sens la phrase correspondante du fragment de Théophraste, dans Simplicius, à condition de prendre σῶμα comme sujet de ἔχει (avec ἅπαν τὸ φύσει sous-entendu en fonction de complément), plutôt que comme son complément. Le zeugme est surprenant, mais paraît tolérable (dans le passage de Simplicius cité à la n. 6 par exemple, ὅτι, dans la phrase qui précède l'introduction du nom de Théophraste, est à la fois complément de δείξει et sujet de δέϊται). J. van Ophuijsen m'a fait remarquer que la difficulté disparaît si l'on donne à ἔχειν le sens large d'"impliquer" plutôt que de "posséder." On peut en effet parfaitement dire que

guments par lesquels Théophraste devait avoir établi la nature synthétique de ces deux catégories d'entité. Quant au passage correspondant de Philopon, qui avance une série d'arguments à cet effet, ils sont très certainement contaminés, comme le montre F. de Haas dans le présent volume, par des éléments doctrinaux distinctement philoponiens.²² On peut cependant faire remonter à Théophraste deux éléments aux moins de la paraphrase de Philopon. D'abord, la "composition" dont Théophraste voulait d'emblée créditer l'ensemble des objets naturels doit être celle de la matière et de la forme—on ne voit pas guère ce qu'elle pourrait avoir été sinon.²³ Ensuite, on peut penser que Philopon reproduit adéquatement la position de Théophraste quand il caractérise la seconde catégorie d'entité comme comprenant, par opposition aux corps eux-mêmes, "les tendances, capacités et entités similaires," qu'il appelle aussi "les formes inhérentes au substrat."²⁴ Jusqu'à preuve du contraire, il me paraît en outre parfaitement possible que le schéma général de l'argumentation de Philopon, sinon le détail de la démonstration et l'analyse des exemples, ait déjà figuré dans la *Physique* de Théophraste.²⁵

les qualités et vertus, comme la faculté de voir, "impliquent" ou "supposent" un corps. Le commentaire de Philopon va peut-être en ce sens (cf. ἡ γὰρ ἐνεργεία οὐσα ὅψις οὐκ ἐστὶν αὐτῇ ἡ δύναμις μόνον, ἀλλὰ μετὰ τοῦ ὀπτικοῦ πνεύματος, 4.20–22 (144A 15–16), οὐ μετὰ +gén. correspondrait à ἔχει).

²² Dans l'exposé initial, j'avais trop vite admis que Philopon reproduit l'argumentation de Théophraste. Je remercie F. de Haas d'avoir attiré mon attention sur les difficultés de cette hypothèse, que le découpage de l'édition de référence suggère, bien que, comme me l'a rappelé R. W. Sharples, l'Introduction à l'édition des *Sources* souligne explicitement que tous les textes reproduits ne doivent pas nécessairement être considérés comme théophrastéens (8s.).

²³ L'opuscule métaphysique s'interroge sur la façon dont il convient de concevoir "le partage en matière et forme" (8a7s.). μερισμός ("partage"), qui n'est pas un terme attesté dans ce contexte chez Aristote, se réfère à la "décomposition" des composés naturels.

²⁴ οἷον αἱ ῥοπαὶ καὶ αἱ δυνάμεις καὶ τὰ ὅμοια, 4.13s.; τὰ ἐν ὑποκειμένῳ εἶδη, 4.17 (= 144A 7–8; 11).

²⁵ Pour en décider, on se reportera à l'analyse de F. de Haas, ici même, p. 177–78. Philopon avance quatre raisons de penser que les "formes inhérentes" sont "composées":

- 1) Elles sont constituées de genres et de différences.
- 2) Même si leur définition est simple, elles sont toujours en fait dépendantes du substrat où elles se réalisent (par exemple la vue, qui est une certaine capacité, est toujours liée à un *pneuma* optique).
- 3) La manière dont procède le physicien est de considérer toujours les choses "avec le substrat" (17). L'argument, très proche du précédent, en diffère dans la mesure où Théophraste en appelle à la manière dont les choses sont en elles-mêmes, plutôt qu'à la manière dont les sciences en traitent.

Quelle que soit la part qui revient à Philopon dans la démonstration de la composition de la seconde catégorie d'objets naturels, l'essentiel de l'apport théophrastéen à l'exégèse de la phrase introductive de la *Physique* d'Aristote est d'avoir fourni le complément qu'elle appelle en procédant à la démonstration systématique que les objets naturels sont composés de matière et de forme. La démarche de Théophraste répond de toute évidence au besoin de donner une présentation formellement correcte d'une argumentation et d'un matériau originellement plus diffus.²⁶ Mais l'exégèse va aussi au-delà de ce qu'elle commente. Naturellement, la doctrine de la composition des corps naturels est parfaitement conforme au premier livre de la *Physique* d'Aristote. Le terme de "composé" (*suntheta*), pour se référer aux choses naturelles, figure même au chapitre 4, dans le contexte de l'analyse de la corruption, qui conduit à poser l'existence de principes contraires.²⁷ Néanmoins, non seulement la démonstration initiale, mais la disjonction exhaustive entre deux catégories d'objets physiques, les corps et leurs propriétés, qui lui sert de support, est une nouveauté. Le mouvement même de la systématisation conduit de la *Physique* d'Aristote à la *Physique* de Théophraste.

IV.

142 et 143 figurent respectivement dans la troisième et la quatrième (et dernière) "remarque additionnelle" que Simplicius ajoute au

4) Si l'on n'admet pas que les formes inhérentes sont des composés, elles ne différeront en rien de "la forme du corps" (là encore, l'argument apagogique, bien que différent par la forme, entretient une relation étroite avec le second argument).

(Le fait que le 3e et le 4e arguments varient simplement le second ne justifie pas, me semble-t-il, la traduction de ἄλλως par "as a matter of fact" dans l'édition de référence. Après πρῶτον et ἔπειτα, ἄλλως introduit deux autres 'modes' ou manières d'établir la thèse des formes inhérentes. Au reste, les deux premiers arguments, nettement articulés par πρῶτον/ἔπειτα, sont aussi substantiellement identiques).

²⁶ Chez Simplicius comme chez Philopon, la présence d'un vocabulaire logique est nettement marquée: ἀπόδειξις et le verbe correspondant (Simpl. 9.6 et 7 = 144B 2; 4), συλλογισμός (Philop. 4.9 = 144A 2), πρότασις (Simpl. 9.6 = 144B 2) et ἐλάττων πρότασις (Philop. 4.10), κατασκευάζειν (Philop. 4.11s.): 144A 3–5.

²⁷ οὐδὲ δὴ φθείρεται εἰς τὸ τυχὸν ... ἀλλ' εἰς τὸ μέλαν ἢ τὸ μεταξὺ· ὥς δ' αὐτως καὶ τὸ μουσικὸν εἰς τὸ μὴ μουσικόν, καὶ τοῦτο οὐκ εἰς τὸ τυχὸν ἀλλ' εἰς τὸ ἄμουσον ἢ εἴ τι αὐτῶν ἐστὶ μεταξὺ. ὁμοίως δὲ τοῦτο καὶ ἐπὶ τῶν ἄλλων, ἐπεὶ καὶ τὰ μὴ ἀπλὰ τῶν ὄντων ἀλλὰ σύνθετα κατὰ τὸν αὐτὸν ἔχει λόγον (188b3.5–10). Cf. 7, 190b11.

commentaire proprement dit du lemme considéré (184a16–b14). Ce n'est sans doute pas par hasard que les deux références à Théophraste se situent en conclusion de chacun de ces deux appendices. Dans les deux cas, Simplicius lui donne pour ainsi dire le mot de la fin, comme à une autorité.

Je commencerai par la quatrième remarque, la plus longue des deux, et qui est aussi la seule à comporter une citation littérale.²⁸ Le développement est consacré à un problème qui a déjà fait l'objet d'un long débat dans la tradition exégétique antérieure. Ayant introduit la distinction entre ce qui est plus clair pour nous, mais moins clair par nature, et ce qui est moins clair pour nous, mais plus clair par nature, et posé qu'il convient de procéder de l'un à l'autre en "divisant" les données confuses en leur "constituants élémentaires ou principes," Aristote conclut:

"C'est pourquoi il est nécessaire de progresser des ensembles aux particuliers: car le tout est plus connu selon la sensation, et l'ensemble est un certain tout; en effet l'ensemble embrasse plusieurs choses à titre de parties."²⁹

Le problème vient de ce que le mot qu'Aristote emploie pour désigner ces "ensembles," *ta katholou*, est le terme technique usuel pour désigner les universaux ou les genres, ce que Simplicius appelle quant à lui volontiers "les communs" (*ta koina*).³⁰ Dans ces conditions, dire que les "ensembles" sont plus clairs pour nous, mais moins clairs par nature est juste le contraire de ce qu'on attend. Simplicius rapporte et critique l'interprétation d'Alexandre, ou plutôt ce qui semble avoir été deux hypothèses interprétatives qui se trouvaient chez lui juxtaposées (elles sont dissociées dans le texte de Simplicius).³¹ Selon la première interprétation, *to katholou* désigne bien le genre. S'il peut être dit "premier par nature," c'est parce que la suppression du genre entraîne la

²⁸ Le texte grec complet en est reproduit en appendice, *infra*, p. 168–69.

²⁹ διὸ ἐκ τῶν καθόλου ἐπὶ τὰ καθ' ἕκαστα δεῖ προΐεναι· τὸ γὰρ ὅλον κατὰ τὴν αἴσθησιν γνωριμώτερον, τὸ δὲ καθόλου ὅλον τί ἐσιν· πολλὰ γὰρ περιλαμβάνει ὡς μέρη τὸ καθόλου, 184a23–26.

³⁰ Simplicius substitue d'emblée κοινά au καθόλου d'Aristote (cf. 184a24: "c'est pourquoi il est nécessaire d'aller des ensembles aux particuliers"); les deux termes figurent côte à côte en 19.5–6, τὸ κοινὸν καὶ καθόλου; Simplicius s'autorise sans doute d'une tradition exégétique remontant à Alexandre. Les deux termes sont employés de manière équivalente dans la *Quaestio* 1.11, 24.8–22 (cf. R. Sharples, 55 n. 149, de sa traduction des *Quaestiones*, Ithaca, NY, 1992).

³¹ 19.5–12 et 21–33 respectivement (texte en appendice).

suppression de ce qu'il subsume, tandis que l'inverse n'est pas vrai; mais il n'est pas proprement tel, dans la mesure où l'*ousia* lui est antérieure.³² Ceci autoriserait Aristote à dire que le genre est "plus clair pour nous," puisque, dans cette hiérarchie, c'est à l'*ousia* qu'il revient d'être "plus claire par nature." L'explication est artificielle, et Simplicius en relève le caractère contradictoire, car tout en admettant que les genres ne sont dits premiers qu'improprement, Alexandre est aussi condamné à soutenir qu'ils le sont réellement.³³ Quant à la seconde hypothèse d'Alexandre, elle consiste à entendre les *koina* comme des principes (*axiōmata*) universels, tel, par exemple, "il est nécessaire que les principes soient un ou plusieurs [= non-un]";³⁴ mais elle est tout aussi incompatible avec le texte d'Aristote. Car *ta koina* désignerait dès lors les principes eux-mêmes, et non ce à partir de quoi une "remontée" vers les principes (cf. *anapempsei*) peut être effectuée.³⁵

³² Dans le membre ὅτι μὴδὲ οὐσία, je fais de οὐσία l'attribut de τὸ καθόλου ("car il [= l'universel] n'est pas non plus une substance"), et non le sujet d'une proposition dont l'attribut serait πρῶτον ("car la substance n'est pas non plus première").

³³ L'objection de Simplicius est concise: "on pourrait cependant s'étonner de ce que ce qui est premier par nature ne soit pas premier à proprement parler" (19.11s.). La doctrine d'Alexandre sur les universaux est plus complexe et moins absurde que Simplicius ne la fait, si l'on suit la reconstruction que M. Tweedale en propose ("Alexander of Aphrodisias' views on universals," *Phronesis* 29 (1984) 279–303; voir en particulier 293s.: "The universality or commonness of a definable nature is accidental to it and hence posterior to it ... This nature is also prior to any of the individuals under it since it can exist even though we do away with any given particular (though not all particulars ...), but the particular cannot exist without that nature since that is its own nature." Sur la "mécompréhension" de Simplicius dans un passage du commentaire des *Catégories* (82.23–26 Kalbfleisch) parallèle à celui de la *Physique*, cf. Tweedale, 285 et 293. R. W. Sharples, qui m'a fourni de précieuses informations sur ce point, réexaminera prochainement l'ensemble des données, y compris le témoignage du *Commentaire sur la Physique* de Simplicius que Tweedale ne discute pas.

³⁴ 19.31. Deux autres exemples sont mentionnés l. 25–27 sous une forme interrogative: "Les principes comportent-ils ou non la contrariété?" et "Les principes ont-ils un substrat ou non?"

³⁵ 19.28s. Comme me l'a fait remarquer R. Sharples, la question se pose de savoir si le passage 19.29–33 se situe sur le même plan que 19.21–25, autrement dit si le second représente aussi l'opinion d'Alexandre. En effet, ἐλέγγο indique qu'Alexandre lui-même rapporte ici une opinion. Cela est vrai, mais, me semble-t-il, ne fait pas de réelle différence. Alexandre (et Simplicius qui le cite) cherche dans l'opinion qu'il a précédemment rapportée (et également citée par Simplicius 17.25–31) une justification à l'exégèse qu'il avance maintenant. En effet, les principes *relativement* généraux de la physique (selon l'interprétation d'Alexandre) sont présentés comme réductibles aux principes *absolument* généraux auxquels songe l'interprète anonyme cité par Alexandre. Reste qu'il faudrait examiner plus en détail (comme R. Sharples se propose de le faire) la relation entre la citation de la 19.29ss. et celle de la 17.25ss.

pourrait être amendée si l'on admet que les *koina* sont obtenus par abstraction (*ex aphaireseōs*): dans ce cas, en effet, ils seront effectivement postérieurs par nature, et plus clairs pour nous.³⁶ Mais il préfère en fait reprendre le problème à nouveaux frais.³⁷ Il s'agit de trouver un sens de *ta koina* qui satisfasse à l'exigence (*paraggelma*) aristotélicienne que ces *koina* sont composés de principes physiques.³⁸ La solution à laquelle Simplicius se rallie finalement (20.3–27), et que les commentateurs modernes ont plus ou moins adoptée, consiste à soutenir que les *koina* sont effectivement des propriétés générales, mais qui tombent clairement sous les sens:³⁹ “mais peut-être vaut-il mieux, pour découvrir les principes des objets naturels, partir de ce que nous savons clairement par la sensation advenir aux choses naturelles, ce qui est bien l'opinion d'Aristote.”⁴⁰ L'expression “ce que nous savons clairement par la sensation advenir aux choses naturelles” n'est pas une simple périphrase pour “les sensibles,” mais bien une redescription des propriétés communes (*koina*) comme “généralités sensibles.” C'est bien ce que suggèrent les trois exemples que Simplicius avance en guise d'illustration. Sont en effet considérés comme des faits “généraux” en ce sens 1) l'existence de différentes catégories d'êtres naturels, 2) le fait que ces êtres soient en mouvement, et 3) le fait qu'ils soient soumis au changement, toutes

³⁶ 19.18–21.

³⁷ 19.18. Comme le montre la suite du développement, la phrase τοῦτο μὲν οὖν εἴ τις δύναται καὶ πιθανώτερον ἀπολογιζέσθω ne signifie pas que Simplicius s'en remet à la sagacité d'autres interprètes pour donner une interprétation plus convaincante de la formule énigmatique d'Aristote, mais bien qu'il renonce à justifier de manière plus satisfaisante l'absurdité que représente la “solution” d'Alexandre. Les deux μήποτε οὖν (19.12 et 20.3) ne sont donc pas sur le même plan: le premier vise l'interprète, le second le texte interprété. Seule la seconde occurrence, au reste, est suivie de ἄμεινον (“peut-être vaut-il mieux ...”).

³⁸ 19.33–35.

³⁹ Cf. H. Wagner, *Aristoteles. Physikvorlesung* (Berlin, 1967) 395 (“Das Allgemeine, das am Anfang des Erkenntnisweges steht ... ist bloß sinnlich Allgemeines, unbestimmtes Allgemeines”); W. D. Ross 1955, 457. Pour une discussion du passage, et une nouvelle interprétation de l'exemple des parents et de l'objet rond, cf. D. Konstan, “A Note on Aristotle *Physics* 1. 1,” *Archiv für Geschichte der Philosophie* 57 (1975) 241–45.

⁴⁰ 20.3–5. Pour plus d'intelligibilité, je rends ἐναργῶς καὶ γνωρίμως τῇ αἰσθήσει comme s'il s'agissait d'un *hendiadyn*. Le membre “ce qui est bien l'opinion d'Aristote” peut surprendre, puisque c'est cela qu'il s'agit de démontrer. Mais Simplicius indique seulement par là qu'il est sur le point de citer Aristote lui-même (φησι, l. 6 et 10).

propositions qui dérivent plus ou moins directement de données sensibles.⁴¹

L'interprétation de Simplicius débouche sur une généralisation (*holōs de ... 17*), où se situe la référence à Théophraste:

“et de manière générale, pour parler globalement, il faut aussi croire Théophraste et traquer la vérité relative aux principes physiques à partir des sensations et des sensibles.”⁴²

La formule de Théophraste est ‘plus générale’ que celle d’Aristote (il faut donner toute sa force à *hōs koinōs eipein*, qui renchérit sur *holōs de*)⁴³ dans la mesure où, aux expressions “ensembles confus” et autres “généralités”, il substitue une formule brève, “sensations et sensibles”: Théophraste appelle un chat un chat. Etant donné le contexte de citation, on peut raisonnablement penser que l’énoncé de Théophraste se présente comme une exégèse du terme *ta katholou*, dont la présence ne dut pas lui paraître moins problématique qu’aux commentateurs postérieurs. C’est précisément ce que suggère l’indication *peri toutou zēton* qui introduit la citation de Théophraste, à condition de rapporter le démonstratif au problème même qui fait l’objet de la remarque de Simplicius (ce qui est l’interprétation la plus naturelle).⁴⁴ En tout cas, Simplicius cherche chez Théophraste confirmation de l’interprétation qu’il donne de la formule controversée d’Aristote. Sa lecture laisse supposer non seulement que le terme *ta katholou*, dans la *Physique*,

⁴¹ Je reviens sur ces trois principes dans la section 5.

⁴² 20.17–19 = 143.1–2 FHS&G.

⁴³ La traduction est difficile en français, qui ne dispose guère de synonymes en ce cas. La formule *ὡς κοινῶς εἰπεῖν* pourrait remonter à Théophraste. Elle se trouve en effet, avec valeur généralisante, deux autres fois dans le corpus (*CP* 2.12.1 et 6.5.6), et dans les deux cas, elle renchérit sur *καθόλου*. Une recherche sur le *TLG* révèle que l’expression ne se trouve, mis à part une scholie à l’*Oreste* d’Euripide (*ad* 805) et chez Damascius (*De princ.* 1.314.11), que chez certains commentateurs d’Aristote (une demi-douzaine d’occurrences). Théophraste pourrait bien avoir forgé l’usage. Du coup, on peut aussi se demander si tout le membre *ὡς κοινῶς εἰπεῖν ἀπὸ τῶν αἰσθήσεων καὶ τῶν αἰσθητῶν τὴν περὶ τῶν φυσικῶν ἀρχῶν ἀλήθειαν ἀνιχνευτέον* ne lui revient pas. La métaphore de la remontée à la trace (*ἀνιχνευτέον*) lui convient bien.

⁴⁴ La référence pourrait être, plus généralement, au statut même de la sensation dans la recherche des principes physiques. Simplicius opérerait un simple rapprochement entre le problème particulier dont il traite et une assertion indépendante de Théophraste. Néanmoins, étant donné le caractère exégétique du début du premier livre de la *Physique* de Théophraste, clairement indiqué par 144A/B, l’hypothèse d’une référence plus spécifique paraît préférable.

recouvre ce que Théophraste appelle "sensibles," mais, inversement, que le terme de sensibles, dans l'emploi qu'en fait Théophraste, recouvre ce qu'Aristote appelle les "généralités."

V.

On peut dès lors se demander si l'ensemble du développement qui précède (20.3–17), et dont la citation *verbatim* est comme l'aboutissement naturel, ne remonte pas aussi à Théophraste. La solution que Simplicius défend contre Alexandre n'est-elle pas en réalité la solution de Théophraste, dont le nom n'apparaîtrait que dans la conclusion générale?⁴⁵ Il est sans doute impossible de prouver le point. Mais certains indices peuvent être tirés du traitement que Simplicius réserve aux trois propositions qu'il cite à titre d'exemple de "généralités sensibles."

Ces trois exemples sont tous extraits de la suite du livre I de la *Physique*. Les deux thèses de l'unité du principe (*hoti mia hē archē*) et de la non-immobilité des principes (*hoti ouk akinētoi hai archai*) sont empruntées à la réfutation de Parménide dans le chapitre 2.⁴⁶ La troisième proposition, qui dit que les principes sont contraires, paraphrase le chapitre 5.⁴⁷ Simplicius explique donc *Aristotelem ex Aristotele*. Toutefois, les trois passages ne sont pas exactement sur le même plan chez Aristote et chez son commentateur: dans la *Physique*, les deux premiers font partie de l'examen critique des prédécesseurs, le troisième du développement positif de la théorie aristotélicienne. Si cette différence transparaît encore d'une certaine manière dans la forme même des propositions, négative dans les deux premiers cas ("le principe n'est pas un"; "les principes ne sont pas immobiles"), positive dans le troisième ("les principes sont contraires"), Simplicius fait entièrement abstraction du contexte 'critique' qui est originellement le leur. L'usage qu'il fait des deux propositions est résolument constructif, la réfutation d'Aristote étant, dans un effort de systématisation des données éparses, directement mise au service de la thèse à démontrer. Il en résulte une gradation: si le principe n'est pas un, il en existe plusieurs. Une fois posé que ceux-ci ne sont pas immobiles, la question

⁴⁵ Si tel est le cas, le découpage du 143 FHS&G devrait naturellement être revu.

⁴⁶ 185a27 = 20.6–8; 185a12–14 = 20.10–11.

⁴⁷ 188b3–8.

de leur nature proprement dite peut être abordée. Cette progression excède aussi bien la réfutation de l'éléatisme dans la *Physique* que la structure de la doxographie aristotélicienne, où la question de la mobilité divise les tenants de l'unicité (les Eléates *versus* les Physiciens), mais non les partisans de la pluralité des principes. Peut-on penser qu'elle corresponde à une perspective proprement théophrastéenne?

L'opuscule *Métaphysique* fournit peut-être un indice en ce sens, même si la relation entre les principes premiers et les principes physiques d'une part, entre l'immobilité et la mobilité des uns ou des autres d'autre part, n'y est pas directement thématifiée. L'opuscule est en effet pour le moins réservé quant à la thèse de l'immobilité du premier principe, et, plus généralement des principes.⁴⁸ S'agissant des premiers principes, ceci ne signifie évidemment pas qu'il se prononce pour leur mobilité. La suggestion serait plutôt de substituer la notion d'activité (*energeia*) à celle de repos et de réserver le mouvement aux sensibles.⁴⁹ Théophraste aurait-il été prêt à soutenir que, dans le couple de contraires constitutifs des principes physiques, l'un des termes est "actif" (la forme), tandis que l'autre, la matière, est "mobile"? Nous ne sommes pas en mesure de reconstruire le détail de la théorie.⁵⁰ En tous cas, il semble bien que la proposition générale selon laquelle "les principes ne sont pas immobiles" s'inscrive parfaitement dans le cadre d'une analyse que Théophraste dirige en partie contre Aristote.

L'argument le plus fort en faveur de l'origine théophrastéenne du passage réside cependant moins dans la perspective générale où semble s'inscrire la systématisation des données aristotéliciennes que dans la procédure suivie pour établir chacune des trois thèses mentionnées. Les trois questions du nombre des principes, de leur mobilité, et de leur contrariété doivent toutes recevoir une réponse sur la base d'informations livrées par la sensation. La première (le nombre), parce

⁴⁸ 5a14–21 et 7b9–19.

⁴⁹ 7b11–15. La place du développement dans l'ensemble de l'opuscule a toujours été une source d'embarras, puisque Théophraste, qui a abordé la discussion des principes physiques en 6b23, et qui la poursuit en 8a8, semble ici revenir aux principes premiers. On notera toutefois que Théophraste ne fait aucune distinction explicite entre principes premiers et principes physiques.

⁵⁰ Le passage de la *Métaphysique*, 8a8–20, sur la matière, ne livre aucun élément décisif. On notera, néanmoins, l'usage de l'expression ἀγόμενον εἰς ἐνέργειαν, 8a11, dans le contexte de la question de la relation entre matière et forme.

qu'elle part de "la différence des choses qui existent" (*hē tōn ontōn diaphora*), et que cette différence catégoriale nous est connue par les sens. La seconde (la contrariété), parce qu'elle est établie sur la base du phénomène du changement (*metabolē*), auquel les sens donnent aussi seuls accès. Quant à la mobilité, nous devons également partir des données de la sensation en recourant à l'induction (*epagōgē*).⁵¹

Constat de la différence catégoriale, *perception* du changement, *induction* sur la base de la mobilité: telles sont les trois opérations où le commentateur reconnaît la sensation à l'oeuvre. L'esprit de cette systématisation est bien aristotélicien. Mais il est remarquable que, dans aucun des trois passages d'Aristote mobilisés par l'exégète, l'accent ne soit mis sur la question épistémologique. Si la sensation est à l'oeuvre, elle l'est implicitement. Il est d'autant plus tentant de voir la griffe de Théophraste dans la restructuration qui rapporte des développements hétérogènes du premier livre de la *Physique* au thème épistémologique de son chapitre introductif que la relation que Simplicius établit, à propos du premier principe, entre l'existence de différences ontologiques catégorielles et la connaissance sensible est attestée telle quelle dans l'opuscule dit *Métaphysique*: "que l'être soit de multiple façon est manifeste: en effet, la sensation observe les différences (et recherche les causes)."⁵²

VI.

Quoi qu'il en soit de l'origine théophrastéenne de l'exégèse de Simplicius, la portée du fragment proprement dit de Théophraste s'étend au-delà de l'usage que Simplicius en fait dans le contexte de son commentaire.

⁵¹ 20.5–17. Assez curieusement, c'est la mobilité, non la contrariété, qui correspond à la question de savoir "quels sont les principes" (comparer le programme, 20.2, avec sa mise en oeuvre, 20.5, 9 et 11). La proposition est au reste déplacée par rapport à l'ordre initial des questions, puisqu'elle se trouve insérée entre la question du nombre et celle de la contrariété.

⁵² 8b10–12: τὸ δὲ ὃν ὅτι πολλαχῶς, φανερόν· ἡ γὰρ αἴσθησις καὶ τὰς διαφορὰς θεωρεῖ καὶ τὰς αἰτίας ζητεῖ (comparer Simplicius 20.5). On notera que la description non sémantique de la diversité catégorielle est commune au passage de la *Métaphysique* et au commentaire de Simplicius: "la différence des êtres" (Simplicius) correspond à "l'être est de multiple façon" (Théophraste), là où Aristote écrit "l'être est dit de multiple façon," 185a21 (Cf. Laks et Most 1993, 61s. n. 9). Sur la fonction de la sensation dans la recherche des causes, qui n'a pas à nous retenir ici, cf. *ibid.*, nn. 11 et 12.

“Puisqu’il n’est pas une seule chose dont on puisse parler indépendamment du mouvement (car toutes les choses de la nature sont en mouvement), et [qu’on ne peut] pas non plus [parler] de celles qui occupent le centre indépendamment de la capacité d’être altéré et affecté, il n’est pas possible, quand on parle en relation avec ces choses et à leur propos, d’abandonner la sensation, mais il faut s’efforcer d’étudier (les choses) en la prenant comme point de départ, soit que l’on considère les phénomènes en eux-mêmes soit que l’on parte de ceux-ci, s’il est vrai qu’il existe des principes plus puissants et antérieurs à ceux-ci.”⁵³

D’abord, si le fragment a une portée générale, cela ne vient pas seulement de ce qu’il fait de la sensation le point de départ “général” de l’investigation physique,⁵⁴ mais aussi et surtout de ce que, au lieu d’établir inductivement le primat épistémologique de la sensation en s’appuyant sur trois exemples de dérivation de propositions principiellles à partir de généralités sensibles, il affirme l’existence d’une relation quasi analytique entre l’objet de l’enquête physique et l’usage de la sensation. La raison pour laquelle la recherche des principes physiques doit partir de la sensation est tout simplement que la nature est en mouvement (“puisque’il n’est pas une seule chose dont on puisse parler indépendamment du mouvement, il n’est pas possible de quitter la sensation”). Tout comme, dans le passage précédent, Simplicius (et peut-être déjà Théophraste, cf. section 5) établissait la contrariété des principes sur la base de la perception du changement physique (*hē metabolē hē en tois phusikois*, 20.13), l’enquête sur les principes physiques suppose ici la perception du mouvement (*kinēsis*). La différence, qui est essentielle, est que le mouvement est une caractéristique universelle des objets physiques (*panta en kinēsei ta tēs phuseōs*), ce qui n’est pas le cas du changement: comme il ressort du fragment, l’altération (*alloiōsis*) pourrait tout au plus servir à justifier l’ancrage sensoriel d’une physique de la périphérie terrestre, mais non celui d’une physique céleste, s’il est vrai que le ciel, par hypothèse, n’est pas soumis à l’altération ni de manière générale à l’affection (*oude alloiōtikē oude pathētikē*), mais à la seule translation locale.⁵⁵ Pour

⁵³ Le texte du fragment figure dans le passage de Simplicius reproduit en appendice (p. 169). Je supprime, avec les éditeurs depuis Diels, le *οὐκ* devant *ἀνεμὲν κινήσεως*. Le seul moyen de le justifier serait d’admettre que la négation porte sur la parataxe *μὲν ... δὲ ...* (*οὐδὲ*, dans *οὐδὲ περὶ ἐνὸς λεκτέον*, renforçant la première négation); mais cette construction est rendue impossible par la présence d’une négation indépendante (*οὐχ*) dans le membre introduit par *δὲ*.

⁵⁴ Cf. *supra*, n. 44.

⁵⁵ *ἀλλοίωσις* chez Théophraste correspond à ce que Simplicius appelle *μεταβολή*

garantir la physicalité de l'étude du ciel, il convient de partir de la catégorie du mouvement, plus englobante puisqu'elle est commune au corps célestes et à la péricée. Dans le fragment de Théophraste, la référence spécifique au changement peut ainsi être réintégrée, à sa place, dans le cadre d'une perspective totalisante ou systématique. Nous retrouvons là la préoccupation qui guidait la lecture théophrastéenne de la phrase initiale de la *Physique*,⁵⁶ et les effets en sont analogues. Là encore, Théophraste élargit la portée du texte qu'il commente en posant d'emblée explicitement la question du statut des corps célestes. Toutefois, cet élargissement, plus net encore que dans le cas précédent, débouche cette fois sur une problématique qui non seulement débord les limites de la disciplines, mais excède sans doute la position d'Aristote, que l'on repère aussi dans l'opuscule *Métaphysique* de Théophraste lui-même.

VII.

En effet, le sens du fragment 143 n'est nullement épuisé par la mise en évidence de l'ancrage sensoriel de la science physique en général. L'ambition propre du passage serait plutôt d'étendre la compétence de la sensation (en tant que "point de départ") au-delà même du domaine de l'enquête physique. La fin du fragment mentionne les deux usages possibles du "point de départ" (*apo tautēs archomenous*) qu'offrent les sens: *ē ta phainomena lambanontas kath'hauta ē apo toutōn ei tines ara kuriōterai kai proterai toutōn archai*. En principe, deux options interprétatives peuvent être envisagées, selon qu'on admet que la disjonction prend place à l'intérieur du domaine physique, ou au contraire distingue le domaine physique d'une science des principes premiers. La première solution (qui correspond à l'usage purement "physique" que Simplicius fait du fragment) ne peut être écartée *a priori*, car on peut concevoir que Théophraste ait voulu distinguer, dans l'enquête physique, la description et l'explication prochaine des données phénoménales (*ta phainomena*) de la remontée vers les principes premiers (*tas toutōn archas*)—"premiers" étant dans ce cas à prendre non absolument, mais par rapport aux phénomènes considérés.

ἐν τοῖς φυσικοῖς dans l'argument précédent, 20.13. παθητική est le terme le plus général, donnant la raison pour laquelle l'ἀλλοίωσις n'a pas sa place dans le ciel.

⁵⁶ Cf. *supra*, p. 150.

La répartition des termes de “phénomènes” et de “principes” de part et d’autre de la disjonction pourrait aller en ce sens.⁵⁷ Pourtant, la formule *ei tines ara kuriōterai kai proterai toutōn archai* ne serait guère appropriée dans ce cas. Non que le tour *ei tines ara* implique une réserve à l’égard de l’existence des principes physiques—réserve qui serait d’autant plus déplacée dans l’hypothèse considérée que Théophraste, à la différence d’Aristote, a pris soin d’en fournir d’emblée une démonstration explicite (144A/B).⁵⁸ Mais, vu l’usage de Théophraste, les comparatifs *kuriōterai kai proterai* s’entendent beaucoup plus naturellement des principes absolument premiers, plus puissants et antérieurs aux principes physiques eux-mêmes, que des principes de la physique.⁵⁹ On acceptera donc que le terme de *ta phainomena*, auquel se rapporte le complément du comparatif *toutōn*, englobe les principes des phénomènes non moins que les phénomènes eux-mêmes. Cette lecture permet de rendre compte du curieux dédoublement de l’expression *eis tauta kai peri toutōn legontas*. Pour des raisons internes au fragment, les deux démonstratifs doivent se rapporter aux “choses naturelles”: *oude peri henos* signifie en effet, comme la parenthèse qui suit l’indique clairement, “rien de ce qui relève de la nature,” et non pas “rien absolument.” Aux deux types d’intérêts ou de discours engageant les objets en question, l’un qui porte “sur” eux (*peri toutōn*), l’autre qui s’y réfère (*eis tauta*), on superposera, en chiasme, l’alternative finale. A la considération des phénomènes pour eux-mêmes (*kath’hauta*) correspond un type de discours portant sur les choses naturelles, et donc aussi sur leurs principes (*peri toutōn*): ce sera la physique. A l’examen qui prend les phénomènes comme point de départ (*apo toutōn*) pour parler des principes antérieurs, on fera correspondre un type de discours

⁵⁷ Pour l’idée de l’antériorité, impliquant une certaine supériorité, des principes par rapport à leur dérivés, cf. Théophraste, *Métaphysique* 4a15s., 7a3s. (pour la conception inverse, cf. 6b19s.).

⁵⁸ Dans sa récente étude “οὐν, ἄρα, δὴ, τοίνυν. The Linguistic Articulation of Arguments in Plato’s *Phaedo*,” in C. M. J. Sicking et J. M. van Ophuijsen, *Two Studies in Attic Particle Usage. Lysias and Plato* (Leiden, New York and Köln) 1993, J. M. van Ophuijsen souligne à juste titre que le tour *ei ἄρα* n’exprime pas par lui-même une réserve du locuteur sur la validité de la proposition qu’il introduit (128); Théophraste use volontiers du tour, cf. Laks et Most 1993, 88 n. 67 (*ad* Théophraste, *Métaphysique* 11b19).

⁵⁹ Cf. *Métaphysique* 4b6, 5a1s., 7b14, 10b25s. Dans tous ces passages, un couple formé par *πρότερος* et d’un second adjectif coordonné (*κρείττων* dans les deux premiers cas, *τιμιώτερος* dans les deux derniers) renvoie aux premiers principes.

relatif aux choses naturelles, autrement dit le discours de la métaphysique, du moins quand il explore la frange, toujours problématique, qui le lie au discours physique.⁶⁰ Selon cette interprétation, Théophraste affirme non seulement que les données de la sensation doivent servir de point de départ à l'enquête métaphysique non moins qu'à l'enquête physique, mais aussi, et plus radicalement, que ni l'une ni l'autre ne sont en mesure de "quitter la sensation" (*ouch hoion te katalipein tēn aisthēsin*). Ceci semble impliquer, s'agissant de principes métaphysiques, qu'il n'y a pas d'accès séparé aux principes, indépendamment de ce dont ils sont principes.

VIII.

S'il en va ainsi, 143 va nettement plus loin que l'opuscule *Métaphysique*, en plaçant résolument les principes intelligibles sous la compétence ultime de la sensation. L'opuscule contient en effet à cet égard des indications divergentes. Un passage au moins semble aller clairement dans le sens de la conception radicale représentée dans le fragment. En 4b11–18, Théophraste suggère que la procédure adéquate pour répondre à la question de la nature du ou des principe(s) premiers est "de (les) indiquer d'une manière ou d'une autre, soit par analogie soit par une autre forme de similarité."⁶¹ Bien qu'il ne soit pas explicitement question de sensation, le passage suggère clairement que l'homme est, en matière de métaphysique, condamné à opérer avec les ressources du monde sensible: d'où le recours au raisonnement par similitude, et plus précisément par analogie.⁶² Pourtant, ce passage doit être utilisé avec précaution. Il appartient, non aux développements aporétiques qui forment le corps de l'ouvrage, mais plutôt à la reconstruction de la doctrine aristotélicienne du premier moteur qui, précédant la critique radicale qu'en fait Théophraste, génère la série de questionnements qui suit.⁶³ Or une critique essentielle de Théophraste est justement que la théorie aristotélicienne pourrait bien être de nature purement métaphorique: "si tout désir, et singulièrement celui du

⁶⁰ Tracer la limite des disciplines est une entreprise délicate, cf. *Métaphysique* 10a5–9.

⁶¹ τίς δ' οὖν αὕτη καὶ τίνες, εἰ πλείους, πειρατέον ἐμφαίνειν ἅμῳς γέ πως εἶτε κατ' ἀναλογίαν εἶτε κατ' ἄλλην ὁμοίωσιν.

⁶² Cf. Laks et Most 1993, 31 n. 17 (avec le renvoi à 9a7–9).

⁶³ Cf. Laks et Most, Notice, XXIs.

meilleur, suppose une âme, à moins de parler par similitude et par métaphore, les êtres mus seront animés.”⁶⁴ Il se pourrait donc que l’aval précédemment donné à la procédure analogique en matière de recherches principiellles ait été provisoire et purement tactique, une restitution par Théophraste de la démarche aristotélicienne dans le contexte de la remontée vers le moteur immobile plutôt qu’un énoncé auquel il souscrirait personnellement. Dans cette hypothèse, il y aurait encore place dans l’opuscule pour un type d’accès aux principes premiers qui ne soit pas analogique, et dans cette mesure indépendant du sensible.

De fait, un second passage, qui fait lui partie du développement proprement aporétique et porte directement sur l’usage épistémologique de la sensation, semble à première vue aller en ce sens, même si les données ne sont pas non plus ici univoques, en raison même de la forme aporétique de l’argumentation. Ayant provisoirement admis que les sensibles et les intelligibles sont “d’une certaine manière tous deux des principes” (9b6), Théophraste se corrige immédiatement: “Mais peut-être les uns le sont-ils pour nous, et les autres absolument, ou mieux les uns sont-ils fin, et les autres un point de départ qui nous est propre.”⁶⁵ La seconde des deux substitutions, plus radicale que la première, semble faire écho au 143: en remplaçant le terme de “fin” par celui de “principe” (“point de départ”), elle élimine en effet la possibilité de concevoir les intelligibles comme un “point de départ,” fût-il absolu, et suggère par là-même fortement que la recherche des principes métaphysiques doit être ancrée dans la sphère du sensible. Pourtant, la suite dément cette perspective:

“il nous est donc possible jusqu’à un certain point d’étudier les choses au moyen de la cause, en prenant notre point de départ dans les sensations (*archas apo tōn aistheseōn lambanontes*). Mais quand nous passons aux êtres suprêmes et premiers eux-mêmes, nous ne le pouvons plus, soit parce qu’ils s’ont pas de cause, soit en raison de notre faiblesse à l’égard de ce qui est, pour ainsi dire, le plus lumineux à regarder.”⁶⁶

⁶⁴ εἰ δ’ ἡ ἔφεσις ἄλλως τε καὶ τοῦ ἀρίστου μετὰ ψυχῆς, εἰ μὴ τις λέγοι καθ’ ὁμοιότητα καὶ μεταφοράν, ἔμψυχ’ ἂν εἴη τὰ κινούμενα (5a28–b2).

⁶⁵ τάχα δ’ ἡ μὲν ἡμῖν ἡ δ’ ἀπλῶς, ἡ τὸ μὲν τέλος ἡ δ’ ἡμετέρα τις ἀρχή (9b6–8)

⁶⁶ μέχρι μὲν οὖν τινὸς δυνάμεθα δι’ αἰτίου θεωρεῖν, ἀρχὰς ἀπὸ τῶν αἰσθήσεων λαμβάνοντες· ὅταν δὲ ἐπ’ αὐτὰ τὰ ἄκρα καὶ πρῶτα μεταβαίνωμεν, οὐκέτι δυνάμεθα, εἴτε διὰ τὸ μὴ ἔχειν αἰτίαν εἴτε διὰ τὴν ἡμετέραν ἀσθένειαν ὥσπερ πρὸς τὰ φωτεινότερα βλέπειν (9b8–13).

Certes, l'hypothèse de la "faiblesse" humaine, si elle devait être retenue, pourrait-elle encore fonder la légitimité de la démarche analogique, en accord avec l'invitation de 4b11–13 à "indiquer d'une manière ou d'une autre" la nature des principes en s'appuyant sur les similitudes (sensibles). Mais la considération finale, qui, écartant l'un et l'autre membres de la disjonction, mobilise les ressources de l'intellect intuitif, opère un véritable retournement:

"mais peut-être est-il plus vrai de dire que la connaissance des êtres de ce genre s'effectue au moyen de l'intellect lui-même, quand il les touche et pour ainsi dire les saisit, raison pour laquelle justement il n'y a pas d'illusion à leur sujet."⁶⁷

Dans cette perspective, l'homme est loin d'être livré sans recours à la procédure analogique en raison de sa dépendance à l'égard des données sensibles. Il a au contraire un accès direct, par le biais de l'intuition intellectuelle, aux principes premiers. Naturellement, il est difficile d'être certain que telle est bien la position à laquelle Théophraste se rallie effectivement. La formule "mais peut-être est-il plus vrai" a beau se présenter comme un correctif, elle laisse encore planer un certain doute sur son bien fondé. Toujours est-il que l'option est ouverte. Parce que la saisie des intelligibles suppose un saut hors du sensible, il a bien, dans les termes du 143, "abandon" de la sensation au profit de l'intellection directe, au moment où la sensation nous abandonne.⁶⁸

IX.

Le resserrement de la perspective, de la métaphysique à la physique, n'est pas moins perceptible dans l'usage que Simplicius fait de Théophraste dans 142 qui, situé à la fin de la (courte) troisième remarque additionnelle *ad* 184a16–b14, repose probablement sur un passage de Théophraste proche de la citation du 143, bien qu'il ne le recoupe pas entièrement:

⁶⁷ τάχα δ' ἐκεῖνο ἀληθέστερον ὡς αὐτῷ τῷ νῷ τῶν τοιούτων ἡ θεωρία θιγόντι καὶ οἷον ἀπαμένῳ, διὸ καὶ οὐκ ἔστιν ἀπάτη περὶ αὐτά (9b13–16). Pour la métaphore du contact appliquée à l'intellect, cf. Aristote *Mét.* A 7, 1072b21.

⁶⁸ Les fragments du second livre *Sur l'âme* (= *Physique*, 5) vont aussi en ce sens (cf. Barbotin 1954, 86), ainsi que le témoignage de Sextus Empiricus, *Adv. Math.* 7.216 (= 301A FHS&G), qui, comme Myles Burnyeat me l'a rappelé, attribue la même évidence à l'intellect qu'à la sensation.

“En troisième lieu, il vaut la peine de nous demander de quelle nature est la démonstration portant sur les choses naturelles. En effet, si une connaissance relative aux choses naturelles se produit quand on connaît les principes et les causes des objets naturels, et que nous trouvons celles-ci à partir des composés et des choses confuses, qu’il n’est pas possible de connaître exactement si les causes n’en sont pas exactement connues, il est clair que la connaissance portant sur les principes s’effectue par le biais de signes indicatifs et n’est pas de nature démonstrative. Et c’est à juste titre que Platon appelait le discours sur la nature ‘discours vraisemblable’, ce à quoi Aristote souscrit puisqu’il veut que la démonstration proprement dite procède de principes immédiats et certains par eux-mêmes ainsi que des causes proprement dites et de ce qui est premier par nature. Ce n’est cependant pas une raison pour mépriser le discours sur la nature; ce qu’il faut est de nous contenter de ce qui est conforme à notre nature et capacité, comme en juge Théophraste.”⁶⁹

Le but de Simplicius est ici, dans le cadre de sa stratégie générale de conciliation entre Aristote et Platon, de conférer un statut ‘platonicien’ à la physique aristotélicienne. L’impossibilité de partir d’une connaissance exacte des principes pour expliquer les objets physiques, et la nécessité, inversement, de partir d’objets “composés et confus” pour s’élever aux principes, fait de la connaissance des principes physiques, et de la physique elle-même, une connaissance inférant sur la base de signes concluants (cf. *tekmēriōdēs*)—une façon de décrire la remontée vers les principes qui permet à Simplicius d’assimiler la démarche aristotélico-théophrastéenne au “discours vraisemblable” du *Timée* platonicien, auquel Simplicius se réfère par le terme d’*eikotologia*.⁷⁰ Bien que la lecture que Simplicius fait de Théophraste

⁶⁹ 18.24–34: Τρίτον δ’ ἐφιστάνειν ἄξιον, ὅποια τίς ἐστὶν ἡ περὶ τῶν φυσικῶν πραγμάτων ἀπόδειξις. εἰ γὰρ τὸ μὲν εἰδέναι τι περὶ τῶν φυσικῶν πραγμάτων ὑπάρχει τοῖς τὰς ἀρχὰς καὶ τὰ αἰτία τῶν φυσικῶν ἐγκυκλίωσι, ταῦτα δὲ ἐκ τῶν συνθέτων ἤδη καὶ συγκεχυμένων εὐρίσκομεν, ἅπερ οὐκ ἔστιν ἀκριβῶς γινῶναι μὴ τῶν αἰτίων ἐγνωσμένων ἀκριβῶς, δῆλον ὅτι τεκμηριώδης ἐστὶν ἡ γνῶσις ἡ περὶ τῶν ἀρχῶν ἀλλ’ οὐκ ἀποδεικτική. καὶ καλῶς ὁ Πλάτων τὴν φυσιολογίαν εἰκοτολογίαν ἔλεγεν εἶναι, ᾧ καὶ Ἀριστοτέλης συμμαρτυρεῖ τὴν κυρίως ἀπόδειξιν ἐξ ἀμέσων καὶ αὐτοπίστων ἀρχῶν καὶ ἐκ τῶν κυρίως αἰτίων καὶ τῇ φύσει προτέρων εἶναι βουλόμενος. ἀλλ’ οὐκ ἀτιμαστέον διὰ τοῦτο φυσιολογίαν, ἀλλ’ ἀρκεῖσθαι χρὴ τῷ κατὰ τὴν ἡμετέραν φύσιν καὶ δύναν, ὥς καὶ Θεοφράστῃ δοκεῖ.

⁷⁰ *Timée* 29B2–D1–3, spéc. D3. *eikotologia*, un hapax chez Simplicius, a été manifestement choisi par la tradition exégétique néoplatonicienne pour se référer commodément au type de discours que Platon appelle εἰκὼς μῦθος/λόγος, comme en témoigne le commentaire de Proclus *Timée* (cf. par exemple 339.1, 340.26, 344 Diehl). Dans deux passages (350.20 et 410.29), la phrase de Proclus suggère, comme celle de Simplicius, que le terme est de Platon (“il a appelé ceci *eikotologia*”), ce qui, à la lettre, n’est évidemment pas le cas.

comme d'Aristote soit clairement 'platonisante', il n'est pas sans intérêt de constater que Simplicius puisse trouver chez Théophraste comme un garant de la légitimité de cette lecture. C'est que d'une part Théophraste, plus qu'Aristote, insiste sur l'unidirectionnalité de la démarche physique. L'expression *arkeisthai chrē*, si elle est de Théophraste (ce qui est vraisemblable, bien qu'elle puisse aussi en principe appartenir à Simplicius), correspond bien à *ouch hoion te katalipein* du 143, et implique, en outre, comme une résignation. L'impossibilité absolue d'abandonner la référence sensible est simplement traduite, positivement, en une invitation à se contenter de ce qu'on a. D'autre part, l'accent est mis ici sur les limitations du sujet connaissant (notre nature et nos capacités), ce qui reflète sans doute aussi une inflexion caractéristique de Théophraste.⁷¹ L'utilisation que fait Simplicius de Théophraste n'en suppose pas moins qu'il néglige la portée générale de l'argument théophrastéen, que la citation de 143 reflète clairement: car, pour reprendre la terminologie adoptée par Simplicius, ce n'est pas seulement la physique, mais la science des premiers principes qu'il conviendrait selon Théophraste (du moins dans ce passage) de qualifier d'*eikotologia*. C'est une question de savoir non seulement si Simplicius (et Aristote) l'auraient suivi sur ce point, mais si telle est bien la 'position' que l'on doit finalement attribuer à Théophraste. Tout dépend de la façon dont on conçoit le rapport entre sa *Physique* et l'opuscule dit *Métaphysique*.

⁷¹ Cf. Cicéron, *Tusc.* 3.69 (= 34A FHS&G). Théophraste pourrait, en cela, parler en platonicien, cf. *Timée* 29C8 (ἀγαπᾶν χρεῖ). Sur le platonisme latent de Théophraste dans l'opuscule *Métaphysique*, cf. Laks et Most, Notice, XXVII.

Appendice

Simplicius, 4e remarque additionnelle au commentaire de Physique, 184a16–b14, 19.1–20.27 Diels (Contexte large du 143 FHS&G).

Τέταρτον δὲ πρὸς τοῖς εἰρημένοις ἄξιον ζητεῖν, πῶς τὰ κοινὰ 19.1
 σαφέστερα μὲν ὡς πρὸς ἡμᾶς, ἀσαφέστερα δὲ τῇ φύσει λέγει ὁ
 Ἀριστοτέλης. εἰ γὰρ ἀσαφέστερα τῇ φύσει, δῆλον ὅτι καὶ
 πορρώτερα καὶ ὕστερα ἔσται τῇ φύσει. καίτοι συναναιρεῖ μὲν τὰ
 κοινά, οὐ συναναιρεῖται δὲ ὅπερ χαρακτηρίζειν τὰ / φύσει πρότερά 5
 φάμεν. καὶ ὁ γε Ἀφροδισιεὺς Ἀλέξανδρος ὁμολογεῖ τὸ κοινὸν καὶ
 καθόλου τῇ φύσει πρότερον εἶναι τῶν ὑπ' αὐτὸ ὡς τὸ ζῶον τοῦ ἀν-
 θρώπου τῷ συναναιρεῖν μὲν, μὴ συναναιρεῖσθαι δέ. καὶ τοῦτο μὲν
 μετρίως ὁ Ἀλέξανδρός φησιν· εἰπὼν δὲ ὅτι “τὸ καθόλου τῇ φύσει
 πρῶτόν ἐστιν” ἐπάγει “οὐ μὴν καὶ κυρίως πρῶτον, ὅτι μὴδὲ οὐσία· 10
 καὶ διὰ τοῦτο ἢ τῶν / κοινῶν γινώσκεις τινος ὕστερα τῆς διὰ τῶν
 οἰκείων, εἴ γε πρῶτα ἐν ἐκάστῳ τὰ τὴν οἰκείαν φύσιν δηλοῦντα.”
 καίτοι θανατάσειεν ἂν τις, πῶς τὸ τῇ φύσει πρῶτον οὐ κυρίως πρῶτόν
 ἐστὶ. μήποτε οὖν ὥσπερ τοῦ ὅλου καὶ συνθέτου τὰ στοιχεῖα καὶ τὰ 15
 μέρη πρότερα τῇ φύσει φησὶν ὁ Ἀριστοτέλης πρῶτα πρὸς ἡμᾶς τὰ
 σύνθετα λέγων ὡς συγκεχυμένα καὶ αἰσθήσει ληπτὰ, / οὕτω καὶ 15
 κοινὰ τὰ ὕστερογενῆ καὶ ἐξ ἀφαιρέσεως λαμβάνει, ἅπερ οὐ
 συναναιρεῖ κυρίως τὰ κατὰ μέρος, ὡς ιδιότητες ψιλὰι
 λαμβανόμεναι, ἀλλ' οὐχ ὡς περιοχαὶ τῶν κατὰ μέρος. τοῦτο μὲν οὖν
 εἴ τις δύναται καὶ πιθανώτερον ἀπολογιζέσθω. ἐπειδὴ δὲ ἀπὸ τῶν
 κοινῶν καὶ συνθέτων καὶ ἡμῖν σαφεστέρων ἐπὶ τὰς ἀρχὰς τῶν 20
 φυσικῶν φησὶ δεῖν ἀνατρέχειν ὁ Ἀριστοτέλης, / ἄξιον ζητεῖν τίνα
 μὲν ἐστὶ τὰ κοινά, τίνα δὲ τὰ τῇ φύσει πρότερα, ἅπερ καὶ ἀρχαὶ τῶν
 φυσικῶν εἰσιν. ὁ μὲν οὖν Ἀλέξανδρος “πρῶτον μὲν, φησί, δείξει ὅτι
 πλείους αἱ ἀρχαὶ καὶ οὐτε μία οὐτε ἄπειροι, εἴτα ὅτι δεῖ καὶ
 ἐναντίωσιν ἐν αὐταῖς εἶναι καὶ τῇ ἐναντιώσει τι ὑποκεῖσθαι, ἀφ' ὧν
 κοινῶν ὄντων μετελθὼν δείξει καὶ τίνες εἰσὶν αὐταί· ὁ γὰρ ἐκεῖνα 25
 εἰδὼς οὐδέπω τὰς ἀρχὰς τίνες εἰσὶν οἶδεν.” ἀλλ' ἐπιστῆσαι ἄξιον. εἰ 25
 γὰρ τὸ “εἰ μία ἢ ἀρχὴ ἢ πλείους” καὶ “εἰ ἐναντίωσιν ἔχουσιν ἢ μὴ”
 καὶ “εἰ ὑπόκειται τι αὐταῖς ἢ μὴ” περὶ αὐτῶν εἴρηται τῶν ἀρχῶν καὶ
 οὐ περὶ τῶν ἐξ αὐτῶν συγκειμένων, πῶς ἀπὸ τῶν συνθέτων ἐπὶ τὰς
 ἀρχὰς ἡμᾶς οὗτος ὁ τρόπος ἀναπέμψει; “ἐλέγετο δέ, φησὶν ὁ 30
 Ἀλέξανδρος, δύνασθαι τίνα λέγεσθαι / καθόλου ὑπ' αὐτοῦ νῦν καὶ 30

τὰ ἀξιώματα, περὶ ὧν εἴρηται πρότερον· οἷς προσχρῆται νῦν. τὸ γὰρ ἀνάγκη ἦτοι μίαν εἶναι τὴν ἀρχὴν ἢ πλείους, ἴσον ἐστὶ τῷ μίαν ἢ οὐ μίαν, τοῦτο δὲ τῷ κατὰ παντὸς τὴν κατάφασιν ἢ τὴν ἀπόφασιν ὀφείλειν κατηγορεῖσθαι ὑποτέτακται.” ἀλλ’ οὐδὲ ταῦτα τὰ κοινὰ σύνθετα ἀπὸ τῶν ἀρχῶν ἐστὶ τῶν φυσικῶν, ὅπερ ἀπαιτεῖ τὸ τοῦ Ἀριστοτέλους παράγγελμα, ἀλλὰ καὶ αὐτὰ περὶ τὰς ἀρχὰς θεωρεῖται [τὸ μίαν ἢ / οὐ μίαν εἶναι]· καὶ ἔδει ἀπὸ τῶν συνθέτων καὶ 20.1 γνωριμωτέρων ἡμῖν γινώσκεσθαι, εἰ μία ἢ ἀρχὴ ἢ πλείους, καὶ εἰ ἐναντία ἢ οὐ, καὶ τίνες αὗται. μήποτε οὖν ἄμεινον ἐκ τῶν τοῖς φυσικοῖς πράγμασιν ἐναργῶς καὶ γνωρίμως τῇ αἰσθήσει ὑπαρχόντων τὰς ἀρχὰς εὐρίσκειν τῶν φυσικῶν, ὥσπερ καὶ τῷ Ἀριστοτέλει δοκεῖ· οἷον ὅτι οὐ μία ἢ ἀρχὴ ἐκ τῆς τῶν ὄντων 5 διαφορᾶς, ὡς μαθησόμεθα· εἰ γὰρ ἐστὶν ἐν τοῖς οὐσι, φησί, καὶ οὐσία καὶ ποσὸν καὶ ποιὸν καὶ ταῦτα εἴτε ἀπολελυμένα ἀπ’ ἀλλήλων εἴτε μὴ, πολλὰ τὰ ὄντα. τὸ δὲ ἀκριβὲς τῶν λεγομένων ὀλίγον ὕστερον μαθησόμεθα. ὅτι δὲ οὐκ ἀκίνητοι αἱ ἀρχαί, ἐκ τῆς ἐναργοῦς τῶν φυσικῶν / κινήσεως δείκνυται· ἡμῖν δὲ ὑποκείσθω, φησί, τὰ φύσει ἢ 10 πάντα ἢ ἔνια κινούμενα· δηλὸν δὲ ἐκ τῆς ἐπαγωγῆς· ὅτι δὲ ἐναντία αἱ ἀρχαί ἔκ τε τῆς τῶν φυσικῶν περὶ τούτου συμφωνίας, καὶ ὅτι εἶδος καὶ στέρησις καὶ ὑποκείμενόν τι ἐκ τῆς μεταβολῆς τῆς ἐν τοῖς φυσικοῖς δείκνυται. εἰ γὰρ ἡ μεταβολὴ μὴ ἐκ τοῦ τυχόντος εἰς τὸ τυχόν, ἀλλ’ ἐξ ἀμούσου (εἰς) / τὸ μουσικόν, καὶ ὅλως ἐκ τοῦ μὴ 15 τοιούτου πεφυκότος δέ, καὶ εἰ ἀνάγκη πᾶσαν μεταβολὴν περὶ τι μένον ὑποκείμενον γίνεσθαι, δηλὸν ὅτι καὶ ἐναντία ὡς εἶδος καὶ στέρησις καὶ περὶ ἀνείδεον ὑποκείμενον. ὅλως δὲ ὡς κοινῶς εἰπεῖν ἀπὸ τῶν αἰσθήσεων καὶ τῶν αἰσθητῶν τὴν περὶ τῶν φυσικῶν ἀρχῶν ἀλήθειαν ἀνιχνευτέον καὶ Θεοφράστῳ πειθομένοις, ὃς περὶ τούτου ζητῶν ἐν πρώτῳ Φυσικῶν τάδε γέγραφεν· “ἐπεὶ δὲ [οὐκ] ἄνευ μὲν κι- 20 νήσεως οὐδὲ περὶ ἐνὸς λεκτέον (πάντα γὰρ ἐν κινήσει τὰ τῆς φύσεως), ἄνευ δὲ ἀλλοιωτικῆς καὶ παθητικῆς οὐχ ὑπὲρ τῶν περὶ τὸ μέσον, εἰς ταῦτα τε καὶ περὶ τούτων λέγοντας οὐχ οἷόν τε καταλιπεῖν τὴν αἴσθησιν, ἀλλ’ ἀπὸ ταύτης ἀρχομένους πειρᾶσθαι χρὴ θεωρεῖν, ἢ τὰ φαινόμενα λαμβάνοντας / καθ’ αὐτὰ ἢ ἀπὸ τούτων εἴ τινες ἄρα 25 κυριώτεραι καὶ πρότεραι τούτων ἀρχαί.” καὶ κάλλιον οἶμαι τοιοῦτόν τινα τρόπον τὴν ἀπὸ τῶν ἡμῖν γνωριμωτέρων ἐπὶ τὰς ἀρχὰς ἐπίβασιν γίνεσθαι. ἀλλ’ ἐπὶ τὰ ἐξῆς ἰτέον.

8

Philoponus on Theophrastus on Composition in Nature*

Frans de Haas

In the new edition of the fragments of Theophrastus¹ we find two testimonies (144A–B FHS&G) concerned with the first sentence of Aristotle's *Physics*. There Aristotle stated that, since knowledge is always knowledge of principles, the science of physics must look for the principles of physical things. Both Philoponus and Simplicius in their commentaries on this passage (144A and 144B respectively)² report that

* This paper was prompted by a presentation by Professor André Laks (Lille) to whom I am grateful for discussion and for his encouragement to put my thoughts down in writing. I want to express my gratitude to the editors of this volume for including my paper with the conference proceedings. I owe a special debt to Marlein van Raalte who shared her knowledge of Theophrastus with me in the discussions preceding the final draft of this paper. Moreover I was able to profit from her commentary on Theophrastus' *Metaphysics* (Leiden 1993). Thanks are also due to Prof. dr. L. M. de Rijk, Dr. Philip van der Eijk and Dr. Jan van Ophuijsen, who provided useful comments.

¹ W. W. Fortenbaugh, P. M. Huby, R. W. Sharples, D. Gutas (eds), *Theophrastus of Eresos. Sources for his Life, Writings, Thought & Influence* (Leiden 1993) (hereafter FHS&G). All references are to their line numbering.

² See Philop. *In Phys.* 4.8–5.6 (= 144A FHS&G), Simplic. *In Phys.* 9.5–10 (= 144B FHS&G).

Theophrastus supplied the minor premise of the syllogism, which was not mentioned by Aristotle, i.e., 'all physical things have principles'. Moreover they say Theophrastus argued for this premise from the composition of all physical things.

Unlike Simplicius, Philoponus inserts an account of the notion of composition involved here and devotes special attention to the various ways in which physical forms and powers can be considered composite. This elaboration (144A 9–28) had been put between parentheses in the Berlin edition of Philoponus' commentary,³ thus suggesting a digression by Philoponus rather than a continuing report of an originally Theophrastean argument. As Robert Sharples has informed me, in FHS&G the parentheses were omitted to avoid the impression that these lines had nothing to do with Theophrastus at all; nor was it judged correct to use parentheses to indicate the flow of the argument. In any case, there is no need to challenge the inclusion of this passage in the source book that FHS&G is intended to be.⁴

This leaves us with the question to what extent we can ascribe the contents of Philoponus' insertion (144A 9–28) to Theophrastus. Professor Laks was the first to raise this question at the Leiden Theophrastus Conference and he also provided an analysis of the argument.⁵ In this paper I want to address the following questions: Is Philoponus reporting Theophrastean thought here or not, and: What motive could Philoponus have had to include this passage at this point in his commentary?

I.

It seems appropriate to start with the text of Aristotle from which the whole issue arises; it runs as follows:

When the objects of an inquiry,⁶ in any department, have principles, causes, or elements, it is through acquaintance with these that knowledge and understanding is attained. For we do not think that we know a thing until we

³ CAG XVI, ed. H. Vitelli (Berlin 1888) 4.15–34.

⁴ See the Introduction of FHS&G, 8–9. Context material such as this will be discussed in the commentary volumes, 13–14.

⁵ See his contribution to this volume, 151–52 n. 25.

⁶ This translation probably assumes μεθόδους (τούτων) ὧν εἰσιν κ.τ.λ. The phrase περὶ πάσας τὰς μεθόδους ὧν εἰσιν ἀρχαὶ ἢ αἰτίαι ἢ στοιχεῖα could also be translated: 'in all inquiries which involve (to whose province belong) principles, causes, or

understanding is attained. For we do not think that we know a thing until we are acquainted with its primary causes or first principles, and have carried our analysis as far as its elements. Plainly, therefore, in the science of nature too our first task will be to try to determine what relates to principles (*Phys.* 1.1, 184a10–16, *Revised Oxford Translation*).

According to our testimonies Theophrastus not only supplied the minor premise, viz. that natural things indeed have principles and causes and elements, but he also pointed out that it was in need of some explanation. He offered this explanation by arguing that all physical things are composite and have principles at least in the sense of components. The complete argument as it emerges from 144A–B may be stated as follows:

- (1) knowledge consists in knowledge of principles
 - (2) all physical things are bodies or have their being in bodies
 - (3) bodies and things that have their being in bodies are composite
 - (4) all physical things are composite (2, 3)
 - (5) all composites have principles
 - (6) all physical things have principles (5, 4)
 - (7) knowledge of physical things consists in knowledge of their principles (1, 6)
- corollary:* the science of physics must try to determine these principles

Aristotle only gives (1) and the corollary of (7), Theophrastus supplies (6) and establishes it by arguing from the composition of physical entities (2–5). It is also clear that the additional paragraph in Philoponus (144A 9–28) is to be regarded as a further explanation of (3), and is in fact mainly concerned with the composition of things that have their being in bodies, i.e., physical forms and powers.

It seems fairly certain that the argument as stated above derives from Theophrastus: both Philoponus and Simplicius refer to Theophrastus' *Physics*, which probably means that they used this work or, perhaps more likely, a (common?) source which referred to it. Moreover, it seems clear from his *Metaphysics* that Theophrastus subscribed to the idea that one should seek causes, even though at some point one had to

elements'. Cf. Philop. *In Phys.* 3.25–30 and 6.18–27 who speaks of the principles of the science. Philoponus in fact employs the distinction between different kinds of principles which is explained by Simplicius, see below. Cf. also Laks, 144–48 in this volume.

accept ultimate principles which have no cause, in order to stop an infinite regress.⁷

In contrast to Philoponus Simplicius is critical of Theophrastus' suggestions. He gives the complete syllogism (*In Phys.* 8.34–9.5), and then points out that a proof of the minor premise is not needed at this stage, since in the sequel Aristotle will make clear that physical things indeed have principles (144B 1–3).⁸ Then he mentions Theophrastus as someone who nevertheless gave such a proof. Simplicius goes on to cite Porphyry as claiming that it is not even the task of the physicist (φυσικός) to inquire whether principles of physical things exist. Simplicius explains that one should distinguish the principles that physical things have *qua* composites from other principles: a physician (ἰατρός) also discusses the four elements of which the human body consists, and a grammarian (γραμματικός) the 24 letters of the alphabet (*In Phys.* 9.10–19). The question however what power (δύναμις) each element has belongs to a higher science: physics in the case of the human body, music in the case of the letters, and first philosophy in the case of physics. This explains why Aristotle only establishes *that* matter and form are the principles of physical things, and confines himself to a description of matter by way of analogy while leaving the discussion of form to first philosophy (9.19–27).⁹

Philoponus, on the other hand, has no critical remarks of the kind. He discusses the complete syllogism (*In Phys.* 3.23–30),¹⁰ suggests brevity (συντομία) as the reason why Aristotle left out the minor premise (6) as well as the conclusion proper (7) (3.30–4.8), and then turns to Theophrastus (4.8ff). Halfway through Theophrastus' argument,

⁷ Obviously, these principles cannot be known by their causes. Cf. Theophr. *Met.* 9b1–24 (with Van Raalte [1993] 395, 445–48 [including a quotation of 144B], 454, 456, 459–63).

⁸ See Aristotle's own conclusion in *Phys.* 1.9, 192b2–3, with Simplicius *In Phys.* 258.28–31. The same critical attitude is evinced by Simplicius' next reference to this argument of Theophrastus in *In Phys.* 21.8–10. In general Simplicius seems to be more sensitive to the requirements of didactic exposition than the other commentators, see C. Luna in I. Hadot, *Simplicius. Commentaire sur les Catégories*, Philosophia Antiqua 51, fasc. III (Leiden 1990) 45–46.

⁹ For Aristotle's account of matter see *Phys.* 1.7, (with e.g. Charlton [1970], Cook [1989]), for his reference to first philosophy see *Phys.* 1.9, 192a34–b1, quoted by Simplicius in the present context.

¹⁰ Philoponus also employs the complete syllogism in a discussion of the syntax of Aristotle's first sentence, see *In Phys.* 6.29–7.14.

Philoponus adds the paragraph on composition, which is lacking in Simplicius. After the insertion Philoponus takes up Theophrastus' proof again and follows it through to its conclusion, stating Aristotle's complete syllogism (144A 29–36). That the paragraph is missing from Simplicius' account is in itself no argument to deny it to Theophrastus, because it seems likely that Simplicius would have refrained from such elaborations at this stage anyhow. Both commentators provide the minor premise of the syllogism before they turn to Theophrastus. Hence we may infer that they pay attention to Theophrastus because he provided a *proof* for this minor premise.

II.

Now, let us assume that the paragraph on composition derives from Philoponus, unless we find:

1. a clear reference by Philoponus to Theophrastus, indicating where he is quoting or paraphrasing Theophrastus and where he is speaking for himself again, or
2. sources that associate a similar doctrine with Theophrastus, whether they be genuine works of Theophrastus or testimonies in Philoponus or elsewhere.

Otherwise, we are left with Philoponus as the *auctor* of the text. This result in its turn might, of course, be corroborated by references to texts by Philoponus illustrating the same vocabulary and/or doctrine (section III).

1. There is one obvious indication that the passage might be Theophrastean. The first sentence of the passage runs (144A 9–14):

Now, that bodies are composite is obvious; but *he says*

- (i) that also capacities which have their being in bodies which underlie them are composite,
- (ii) and in general all forms that are in something that underlies them (are composite),
- (iii) firstly because they are (composed) of genera and differentiae,
- (iv) and then because, even if they *are* simple when they are considered with reference to their definition, nevertheless the definition exists not in reality, but only in thought. (transl. FHS&G, slightly modified, my numbering).

However, it is not at all clear which part of this long sentence depends on the initial *he says* (φησι).¹¹ On the more inclusive interpretation all parts (i–iv) and then perhaps also the sequel reflect Theophrastean reasoning, albeit in Philoponean vocabulary. However, the text also seems to allow for the following, less inclusive, interpretation: with part (i) Philoponus repeats the earlier report about Theophrastus that he gave in lines 5–8, while more elaborately paraphrasing the illustration of ‘tendencies and capacities and the like’, already mentioned; part (ii) broadens the issue, so as to take into account all immanent forms. Because of the grammatical dependence of (i–ii) on the initial *he says*, it is most likely that these sentences still derive from Theophrastus’ argument—in this I agree with Professor Laks.¹² In parts (iii–iv), to continue the less inclusive interpretation, Philoponus starts to explain Theophrastus’ point about composition from his own Neo-Platonic angle and with his own technical vocabulary.¹³

The Greek does not seem to be conclusive as to the question whether the explanation in (iii–iv) is by Theophrastus or by Philoponus. Perhaps φησι with πρῶτον μὲν τῷ ἐκ γενῶν εἶναι rather points to the first alternative.¹⁴ On the other hand, the whole construction is rather loose: the corresponding ἔπειτα is followed by a main clause. Perhaps it is significant that Philoponus refers to this latter argument with ‘as I said’ (ὥς εἶπον, 1.18).¹⁵

¹¹ Note that if 144B 4–7 is a quotation—as the Greek and the quotation marks of FHS&G suggest—144A 5–8 is Philoponus’ paraphrase of Theophrastus’ text.

¹² See 151 in this volume.

¹³ Phrases like ἐν μόνῃ/ψιλῇ τῇ ἐπινοίᾳ, contrasted with ἐν ὑπάρξει abound in the commentators. David Sedley (1987) 148 has drawn attention to the importance of κατὰ τὸν ἴδιον λόγον in Philoponus.

¹⁴ Compare the same construction in line 20: we know that Aristotle himself is responsible for the explanation given in τῷ ... σωμάτων; cf. *Phys.* 2.2, 193b35–194a1, discussed below.

¹⁵ However, Marlein van Raalte suggested to me to regard ἄλλ’ ὁ ὀριστικός λόγος ... ἔχει (144A 13–14) and ὁ γὰρ ὀριστικός ... εἶναι ἐπινοία (144A 18–21) as parentheses to the main argument. Since this seems to be a most satisfactory construction of the Greek, I adopted it in the summary of the argument below by putting these passages between dashes. She also suggested that the parentheses could be Philoponean comments on a Theophrastean main argument. In that case ὥς εἶπον in the second parenthesis would refer to the first parenthesis, while the remaining argument could still draw on Theophrastus. However, we shall see below that it is precisely the remaining argument that turns out to be difficult to reconcile with Theophrastus, not just the parentheses.

Therefore it is uncertain, to say the least, whether the reference to Theophrastus covers parts (iii–iv) of the first sentence of our passage. Since there are no other explicit references to Theophrastus in the remainder of our paragraph we remain in doubt about its attribution. Finally one might add that the repetition of Theophrastus' argument from line 29 onwards makes it look as if Philoponus takes up the thread of an argument that he had left.¹⁶

2. We will have to look for other sources that establish this argumentation as Theophrastean. Unfortunately, however, there is not much to go on. Other references to the issue in Philoponus offer little: in *In Phys.* 108.22–26 he attributes the proof of the minor premise to Theophrastus without referring to anything in lines 9–28 here, and in *In Phys.* 193.7–9 all reference to Theophrastus is omitted. As far as I know, we have no other sources that attest a similar argument for Theophrastus. The notion of composition (σύνθεσις) in other works attributed to Theophrastus never seems to refer to the kinds of composition present in our passage, viz. composition of physical forms according to their definition (consisting of genus and differentia), and composition of physical forms inasmuch as they exist together with their substrate.¹⁷ Alexander of Aphrodisias however comes close. In discussing the problem in what sense form is 'in' matter (*Quaest.* 1.26, 42.25–43.17), he refers to 'Aristotle and Theophrastus' for the second meaning of *per se* as explained in *Arist. Anal. Post.* 1.4, 73a34ff: A belongs *per se* to B if A has B employed in its own definition (=117 FHS&G). Alexander points out that the account of the enmattered form should employ the matter because form is *per se* in matter in this sense. However, the text does not warrant the inference that Theophrastus drew this conclusion as well.

Now, we may ask, to what extent does the philosophical doctrine in the paragraph on composition authorize its attribution to Theophrastus? In order to determine this doctrine an analysis of the structure of the whole argument seems useful:¹⁸

¹⁶ This suggestion is supported by the particle τοίνυν, see LSJ s.v., 3b. Also οὕτω μὲν οὖν (l. 33) is not likely to refer back to anything before line 29.

¹⁷ I have found 'composition' in Theophrastus to refer to parts of plants (*HP* and *CP*, *passim*), colors (*Sens.* 82), odors (*Od.* 14; 29; 38; 47; 57; 58), or false arguments (*Char.* 8.1.1).

¹⁸ This analysis differs from the one Laks provides, n. 25, 151–52 above, in that it brings out an independent contribution of each of the four items 3a–d.

1. It is clear that bodies are composite [i.e., out of matter and form; no further discussion is needed].
2.
 - a. Theophrastus says that also powers which have their being in bodies as a substrate are composite;
 - b. The same holds for all forms that have their being in a substrate generally.¹⁹
3. Four arguments are given to justify calling these forms composite (2a–b):
 - a. They are composed of genera and differentiae.
 - b. Even if they are not composed in this way, i.e., according to their definition—which has being in thought only—these powers and forms are considered together with their substrate because they are such as to have being *in* something (e.g. the power of actual sight exists together with the optical *pneuma*).²⁰
 - c. Because physicists study these forms as physical things in reality they take the substrate into account.—As I said, the definition exists only in thought. This is why Aristotle rejected the existence of Forms of physical things: physical forms cannot exist separately from bodies unless in pure thought (cf. 3b).—
 - d. There is an analogy between the physical forms that have their being in body²¹ and the form of body and *its* substrate:
 - (i) the form of body, i.e., three-dimensionality, is simple in definition but needs matter for its existence, the result being that body-in-existence is a compound of matter and form.
 - (ii) physical forms are simple according to their definition²² but, taken as actually existing, they are considered together with their substrate, body; in this respect they are composite.

I would like to single out two issues for further examination. First, the whole argument turns on a distinction between physical powers and forms as far as their *definition* is concerned, and the same powers and forms as far as their *existence* in the world around us is concerned. Secondly, three-dimensionality is said to be the form of body in 3d(i) and thus plays a significant role in the stratification of nature. As we shall see it is difficult to reconcile either one of these issues with Theophrastus' thought as we know it.

¹⁹ This substrate is not necessarily body though body is the focus of physics, compare Arist. *De Cael.* 1.1, 268a1–6.

²⁰ For πνεῦμα as the substrate of the αἰσθητικὴ δύναμις cf. Philop. *In De An.* 438.25–439.2.

²¹ These are what I take ταῦτα (144A 21) to refer to.

²² Apparently we are to infer that 3b applies to physical forms and that 3a is irrelevant in this respect.

2.1 As to the first issue, in *Physics* 2.2, 194a12–b8²³ Aristotle argued that nature should not be studied without matter; in that sense it counts as analogous to the snubnose. Proper understanding of such a ‘something definite in something definite’ (τόδε ἐν τῷδε) requires an account of both form and the appropriate matter.²⁴ Earlier in 2.2 Aristotle had employed this characteristic of physics to distinguish the sciences. Physicists have to take both form and matter into account; mathematicians treat of items that are separable from matter in thought (though not in reality); first philosophy studies objects that are not only separate in thought, but in reality as well. Platonists are mistaken because they separate physical forms which are even less separable than mathematics.²⁵ No doubt these Aristotelian tenets constitute the background for 3b–c.

Theophrastus, in his *Metaphysics* and elsewhere, shows that he has taken to heart Aristotle’s lessons in the *Physics*. There is reason to believe that his notion of the cosmos as an organic whole entails, among other things, a close connection between matter and form.²⁶ This starting point finds application in his treatment of e.g. perception and soul.²⁷ However, in 144A it is considered perfectly acceptable to define physical forms without reference to the substrate they need for their existence. Although the co-existence of form and matter is stressed, the distinction between definition and existence is upheld throughout. It is the validity of this distinction that seems to be difficult to square with

²³ See also *De An.* 403a29–b16, a passage Philoponus refers to at *In Phys.* 228.15–16.

²⁴ For a discussion of the analogy, see e.g. Mansion (1969), Charlton (1970) 95–97. For relevant examples of ‘snubnose’ in Aristotle, see *Phys.* 2.2, 194a1–14; *De An.* 3.4, 429b13–14 (τόδε ἐν τῷδε), 429b18–21; 3.7, 431b12–17; *Metaph.* 6.1, 1025b30–1026a6; 7.10, 1034b34–1035a7, 1035a25–27; 7.11, 1037a29–33; [9.7, 1064a19–28]. Cf. *De Cael.* 1.9, 278a23–b8 (γυμνότης); *Metaph.* 7.11, 1036b23–32.

²⁵ See *Phys.* 2.2, 193b22–194a12; *Metaph.* 6.1, 1026a6–22, [11.7, 1064a21–b6]. For Philoponus’ comments on this lemma, see below.

²⁶ On the kind of unity involved, see Theophr. *Met.* 8a4–7; 159 FHS&G (on which Van Raalte [1993] 483, [1988] 197). On the whole consisting of both contraries, compare Theophr. *Met.* 11b2–12, 7a6–10 (on which Van Raalte [1993] 297–98), 8a8–20; 318.3–4 FHS&G. These passages also show that it would indeed be obvious to Theophrastus that physical things are composite in the sense stated under (1) above.

²⁷ In Theophr. *CP* 6.2.1–2 *Sens.* 72.8, the role of the relevant ὑποκείμενον or πάσχον in explanation is stressed; 320A FHS&G (on which Van Raalte [1993] 295–98), in discussing the relation between active and passive νοῦς, states that form and matter are a unity (but since this is a fragment taken from Themistius’ *De Anima* commentary some caution is called for).

Theophrastus' thought as we know it. In this connection it may be significant that the idea of physical forms being composed of genera and differentiae (3a) seems to have no parallel in Theophrastus.

According to a recent interpretation,²⁸ Aristotle provides an alternative approach to sensible substances in *Metaphysics* VII. In his quest for primary substance Aristotle arrives at the form (1032b1–2); hence the definition of the primary substance consists only of the definition of the form, without reference to the matter it exists in (1035b33–34, 1036a27–31). In this context we also find genus and differentiae as parts of the definition of the form (1037b29–30).²⁹ Consequently, it appears that the metaphysician is interested in a different entity than the physicist: the former seeks the primary substance, the latter concentrates on the composite substance. Therefore the metaphysician defines forms without their substrate, whereas the physicist defines composites including their substrate.³⁰ As far as I can tell, there is no sign that Theophrastus subscribes to the alternative approach to sensible substances that would (on this interpretation) emerge from Aristotle's *Metaphysics*.

2.2 The second issue that needs consideration is the role of three-dimensionality. I want to draw attention to two points. First, in our paragraph physical forms are said to have body (conceived as three-dimensionality + matter) as their substrate, in the same way as the three-dimensional, which is the form of body, has matter as its substrate. The analysis by means of substrates recalls Aristotle's *Met.* 7.3, 1029a10ff. There Aristotle subtracts attributes from a composite substance, until only matter remains; the last level before matter is designated as length, breadth and width.³¹ The passage is notoriously vague about the exact

²⁸ See Frede (1990), also endorsed by Morrison (1990) in his otherwise critical comments on Frede's paper.

²⁹ For Aristotle's solution to the problem of the unity of the definition, see Frede (1990) 127–29. Cf. *Top.* 6.6, 143b19–20, 7.3, 153a15ff.

³⁰ See Morrison (1990) 135, 143–44; cf. 140 where the origin of the traditional interpretation is delineated, i.e., the interpretation that the definition of physical forms *always* includes matter, also according to *Metaphysics* VII. There is no need to enter into that important debate here—I mention it here because it provides a convenient starting point for the interpretation of Philoponus' views, below.

³¹ Cf. *Phys.* 4.2, 209b6–11. For a comparison of *Met.* 7.3 and *Phys.* 4.2 and their significance for the philosophical tradition see De Haas (1995) 74–86. Sorabji (1988) Ch. 1–3 has traced part of the evolution of this level of analysis in later thought (also in Philoponus) and the role it assumed as second or first substrate. For the Neoplatonic

nature of matter, although it becomes clear in the sequel that it cannot be described by any of the categories of being. As is well-known, passages such as these gave rise to the notion of prime matter, the attribution of which to Aristotle is still disputed.³² 144A FHS&G seems to be referring to prime matter, which together with the form of three-dimensionality is said to make up the composite entity 'body'. In its turn body serves as the substrate for all physical forms.

As far as I know, Theophrastus never discusses prime matter. Nevertheless an echo of Arist. *Met.* 7.3, 1029a10ff. can be found in his own chapter on matter, *Met.* 8, 8a17–19, where matter is tentatively described as not being this particular thing, nor of a certain quality, nor of a certain quantity, but indeterminate.³³ However, there is no indication that Theophrastus envisages a subtraction series as Aristotle did; rather he stresses the use of analogy (8a19–20) as the proper way of understanding matter.³⁴ Nor does he make it clear that his description applies to the *ultimate* substrate (contrast Arist. *Met.* 7.3, 1029a24, τὸ ἔσχατον). Theophrastus' aim in his chapter on matter seems to be to understand the general principle that matter constitutes for him, not any particular level such as prime matter. Moreover, it is not clear that Theophrastus ever envisaged prime matter as the substrate of the elementary qualities, a traditional role of prime matter.³⁵ Finally, and this seems to be deci-

antecedents of three-dimensionality as a separate level see De Haas (1995) Ch. 3.

³² A discussion of that debate transcends the limits of this paper; a convenient summary of the problem with the relevant texts and bibliography can be found in Charlton (1970) Appendix 129–45 (see 136–38 for *Met.* 7.3). Cf. most recently Bemelmans (1995) who has argued anew that the notion of prime matter cannot have been part of Aristotle's philosophy.

³³ Theophrastus seems to justify granting indeterminate being to matter by referring to a certain capacity, probably (in view of the analogy with the crafts) the capacity to receive forms. Cf. Van Raalte (1993) 376. Apparently F. Solmsen, "Aristotle and Prime Matter: A Reply to Hugh King", *JHI* 19 (1958) 247 takes Theophrastus to refer to prime matter here.

³⁴ On Aristotle's use of analogy in this context see e.g. Cook (1989).

³⁵ Cf. Steinmetz (1969) 244–49: often homoiomerous parts are more important than the elements; the primary qualities, of which hotness (related to *pneuma*) plays a conspicuous role, are the characterizing qualities of both. Steinmetz can only assume that Theophrastus did not contradict Aristotle's *GC* on the 'nur negativ bestimmbar und unablässbar Hyle' (246)—the interpretation of Arist. *GC* 2.1 of course plays a major role in the debate about prime matter in Aristotle. Steinmetz believes it is not possible any more to find out what Theophrastus thought about the change of pure elements into each other, apart from his apparent restriction of this change to earth, water and air (248).

sive, the fairly independent role of three-dimensionality in the lower realms of the physical world is not attested for Theophrastus but arguably originates from a later date. The earliest antecedent for three-dimensionality in relation to matter accepted by Sorabji is Simplicius' account of the interpretation of Plato's *Timaeus* by Moderatus of Gades (first century AD).³⁶

We may conclude that it is difficult to connect the two issues discussed above with Theophrastus. Parallel sources are missing, and we even have reason to believe that the paragraph on composition contains pieces of doctrine that cannot be reconciled with Theophrastus' thought. At this point in our argument, the only possibility remaining is that perhaps Theophrastus added some argument on the composition of physical things to his introduction of the minor premise, which prompted Philoponus to write his own discussion. However that may be, we find ourselves left with Philoponus as the *auctor* of the passage.

III.

Returning to the analysis of the paragraph on composition, let us now see to what extent each of the four reasons for calling forms in a substrate composite (3a–d) is paralleled by anything in Philoponus. As to the first reason, i.e., forms are composed out of genera and differentiae as far as their definition is concerned (3a), we find an oblique reference to this type of composition in Philop. *In Anal.Pr.* 14.33–34 concerning the definition of the species: 'So the same'³⁷ holds also in the case of physical things. For with them too the differentiae and the genera, of which the species (εἴδη) consist, are simple, and when these are destroyed so are the species.³⁸ Of course the definition of the species applies to each immanent form, if taken separately from its substrate.

³⁶ See Sorabji (1988) 20, 31–38; for Philoponus, see below. Of course the Stoics regarded body as substrate, but they did not have the notion of an incorporeal prime matter. For Simplicius' treatment of the notion of prime matter and the context of his quotation of Moderatus, see De Haas (1995) 114–39.

³⁷ On the principle of non-reciprocate destruction (e.g. when 'animal' is abolished, so is 'man', but not vice versa) parts of sentences are by nature prior to the whole, but as far as this principle is concerned, there is no natural priority between the wholes. With physical things, the parts of the *eide* are prior, but the *eide* themselves are equivalent, cf. *In Anal.Pr.* 14.29–15.4.

³⁸ The 'physical things' (τῶν φυσικῶν) here are no doubt the exemplary genus and species of 'animal' and 'man' mentioned in the previous note.

This is even more obvious in a Neoplatonic setting where one and the same universal exists (i) prior to the particulars, as an intelligible cause, (ii) within the particulars, as the Aristotelian immanent form, and (iii) following the particulars, as the concept derived by us from particulars, existing in thought.³⁹ However, since composition out of genera and differentiae is limited to the *definition* of the form (144A 12: κατὰ τὸν ὁριστικὸν λόγον) the text is in agreement with Aristotle's *Metaphysics* as interpreted above.

The second reason (3b) changes the focus from the definition of the physical form—regardless of its physical substrate—to its *existence* in a substrate. We saw that this distinction seemed difficult to reconcile with Theophrastus' thought. Philoponus however provides an interesting discussion of this issue in his comments on *Phys.* 2.2, 193b35–194a1, already referred to above.⁴⁰ There Aristotle criticizes the Platonists' separation of physical forms. Aristotle claims that the proponents of the Ideas 'separate the physical things (τὰ φυσικά), although these are less separable than mathematical.' First Philoponus claims that 'less separable' means 'in no way separable' and goes on to state the usual interpretation that physical forms cannot even be considered apart from matter in thought (*In Phys.* 224.3–225.3).⁴¹ But then he adds a rather personal aside⁴² concerning an objection one might raise against Aristotle (225.4–226.11). Though Philoponus is ready to accept Aristotle's remarks as a criticism of Plato, he warns us that Aristotle would be wrong if he meant that natural forms cannot be separated from matter in thought at all. Does not the distinction between matter and form as introduced and employed by Aristotle testify to the separability of forms

³⁹ See Benakis (1987), esp. 84. Notice the references to existence in thought in 3b–c. *Simpl. In Cael.* 166.26–27, 35 shows that form and species are both considered composites of genera and differentiae, cf. *Simpl. In Cat.* 80.5–8. For the multiple role of the genus, cf. *Simpl. In Cat.* 76.25–77.4.

⁴⁰ See 176 n. 14. Philoponus' discussion is to be found in *In Phys.* 225.4–226.11.

⁴¹ Cf. *Philop. In Phys.* 221.25–222.10.

⁴² Philoponus explicitly speaks in his own person, cf. 225.5 'But for my part I assert that ...; 225.8–10 'But if he is saying this ... [that] does not seem reasonable to me'; 226.4–5 'This then, as I said, is how we must understand him ...' (transl. Lacey [1993]). Such references to his own person do not occur in the first, more conventional part of the lemma, 224.3–225.3. With regard to 144A, the absence of references to his own person does not warrant the conclusion that Philoponus is *not* speaking in his own person and *therefore* reporting Theophrastus' thought, especially when the reported thought is unparalleled in Theophrastus.

in thought?⁴³ Thus, Philoponus continues, Aristotle's remark in 193b35–194a1 only makes sense if Aristotle took Plato's forms for substances, and composite substances at that. This would be understandable since Platonists speak of Forms in terms of 'horse-itself', 'man-itself', obscure expressions which could very well be taken as referring to separately existing *composites* of form and substrate. In that case Aristotle would be right to resist separation from matter, even in thought. This way the problem is solved: Aristotle is arguing from a mistaken interpretation of the Platonists' point of view, not his own view.

Hence we find that Philoponus' interpretation of Aristotle corresponds to our paragraph in 144A: surely physical forms can be *studied* apart from their substrates—Aristotle does so many times—they merely cannot *exist* without them. Philoponus is perfectly capable of distinguishing different approaches to sensible substances.⁴⁴

The presence of this distinction in Philoponus' thought also explains the role of the third reason (3c), that physicists study physical forms in existence, together with their substrate. The argument establishes the proper perspective: in the context of physics, the composite is the object of inquiry. The fact that this is not the only acceptable approach to physical forms adds weight to an argument that would be repetitive otherwise: in 3b it is already stated that physical forms are considered together with their substrate as far as their existence is concerned.

The fourth argument for calling physical forms in a substrate composite (3d) consists in an analogy between those forms and the form of body conceived as three-dimensionality. Philoponus has acquired some fame because of his doctrine that three-dimensionality is prime matter, but at the time he was writing the text we are dealing with, he had not yet

⁴³ Philoponus refers to the idea of matter receiving different forms, to the discussion of physical entities in terms of their form, their matter or both in *GC* 1.5, 321b19–22, and to Aristotle's statement that separate forms are the objects of first philosophy (*Phys.* 194b12–15); cf. Lacey (1993) 157 nn. 248–49.

⁴⁴ Cf. Philop. *In Phys.* 218.21–221.25, 228.5–24 (containing a reference to *De An.* 403a29–b16) and 239.25–240.31 for a determination of the task of the physicist. For separation in thought cf. Ps.-Philop. *In Anal. Post.* 339.6–16 with the interesting comments by J. De Groot, *Aristotle and Philoponus on Light* (New York/London 1991) 104–5. She assumes (113–14 n. 7) that if this part of the commentary on the *Posterior Analytics* is not by Philoponus (so Wallies in his introduction to the *CAG* edition, *CAG* 13.3 [Berlin 1909] v–vi), it will at least represent the point of view of the Alexandrian school. Compare Philop. *In De Intell.* 22.21–23.30, 34.7–14, 89.00–5, 108.64–78.

arrived at that position.⁴⁵ However, three-dimensionality had already acquired a secure place in Neoplatonic physics by the time of Philoponus. Our passage fits very well in a series of other passages testifying that Philoponus at one time endorsed the conception of the level of the three-dimensional between prime matter and the elements.⁴⁶ As it happens, the three-dimensional is found in the very same passage about Aristotle's criticism of Platonic separation mentioned above. This passage (*In Phys.* 225.11–16) is worth quoting:

We say at any rate that the form is different from the matter, and one and the same persisting matter receives different [forms] in turn, [which implies that] the forms are other things alongside it. And what do I mean by matter? Well, according to him [Aristotle] the second substrate, i.e., the three-dimensional, is other than flesh and bone and all the rest of the forms, being qualityless in itself. (Transl. Lacey [1993] 38, slightly modified.)

Here the three-dimensional is found in the same position it has in 144A: as the substrate of physical forms, but itself only second substrate, prime matter being the first substrate.⁴⁷

⁴⁵ Verrycken (1990) has argued for a distinction between an earlier, Neoplatonic, and a later, more Christian, period in Philoponus' philosophizing (Philoponus 1 and 2), and for a chronology of his works in accordance with this distinction. Verrycken also wants to separate earlier and later strands within the *Physics* commentary we are dealing with here (249). According to Verrycken 144A FHS&G and its context, as well as the commentary on *Phys.* 195b35–194a1 (*In Phys.* 225.4–226.11) belong to Philoponus 1, and date from the period before the suggested revision of the commentary in 529 A.D.—i.e., probably from 517 A.D., the date mentioned in the commentary itself (703.16–17). In his later period Philoponus abandoned the idea that three-dimensionality has prime matter as its substrate and made three-dimensionality itself the first substrate of all natural entities. This claim is argued for at length in Philop. *Contra Proclum* 11.1–8, e.g. 11.6, 425.6–24. For a philosophical and historical examination of *Contra Proclum* 11.1–8, see De Haas (1995). Cf. Sorabji (1987) 18–23; id. (1988) Ch. 2.

⁴⁶ See e.g. Philop. *In Cat.* 65.10–22, 83.13–19; *In Phys.* 225.14–16 (translated below), 232.1–6, 244.6–9. Philop. *In Phys.* 8.19–23 states that to know the principles of μετέωρα means knowing their immediate causes. Prime matter does not come into it, because that has to do with understanding them not *qua* μετέωρα but *qua* bodies. This suggests the same stratification. Contrast *Contra Proclum* 11.1, 408.1–4, 409.20–410.1 where the same picture is drawn as the common view of 'Platonists and Pythagoreans', but now only to be attacked.

⁴⁷ Cf. e.g. Philop. *In Cat.* 65.10–22. In Philop. *In De An.* 344.22–27 the three-dimensional *qua* form of body is considered immaterial like every form and contrasted with a particular body (τόδε τὸ σῶμα) which is a compound of matter and form.

We can now see that the second part of Philoponus' comments on *Phys.* 193b35–194a1 (*In Phys.* 225.4–226.11) combines many of the elements of the paragraph on composition in 144A FHS&G. It distinguishes between regarding physical forms separately in thought and regarding composites of form and matter as a whole (3a–c); it is itself an explanation of Aristotle's criticism on Platonic separation (referred to in 3b–c); it employs the notion of the three-dimensional as the substrate of physical forms (3d). What is more important, it presents itself as a personal aside by Philoponus. Therefore, this passage alone seems to provide sufficient reason to regard the paragraph on composition as Philoponian.

But there is more. According to 3d(i) the three-dimensional is simple *qua* definition. In texts from his later period Philoponus explicitly argued that the three-dimensional (regarded as prime matter) is simple *qua* definition, and that any composition is accounted for by its being characterized by forms.⁴⁸ In Philoponus' most elaborate discussion of the issue (*Contra Proclum* 11.7, 428.5–17) we also find an argument that does not depend on regarding the three-dimensional as prime matter. He claims that 'being extended in three [dimensions] does not provide us with the concept of composition'—especially when Plato's suggestion that bodies consist of surfaces or lines is impossible (428.10–14). It seems to me that this view of three-dimensionality is also compatible with the earlier Philoponus. Anyhow, from Philoponus' point of view one can easily understand the example of the three-dimensional: its relation to prime matter in constituting body is analogous to the relation of physical forms to body in constituting physical entities.

The parallels in wording and doctrine adduced above make, I think, a good case in favour of Philoponus' intellectual authorship of 144A 9–28. If this is accepted, the relation of this paragraph with Theophrastus is reduced to the theoretical possibility that the latter wrote a paragraph on composition—but without the distinction between definition and ex-

⁴⁸ See *Contra Proclum* 11.3, 415.6–10: in the composite of matter and form, form is not composite, so why should matter (= the three-dimensional) be? Simpl. *In Cael.* 166.2–5 (= part of Philop. *Contra Aristotelem* fr. 86 Wildberg) implies the simplicity of Philoponus' three-dimensionality as well. Note that in Simplicius' report the three-dimensional—now in the role of prime matter—is only regarded as composite when it is characterised by opposite qualities. This is the same kind of composition we find for physical forms in 144A.

istence which is the backbone of 3a–c and without the analogy of which 3d consists.

If the substance of the paragraph is to be ascribed to Philoponus, we should try to answer the second question raised at the outset: Why would Philoponus include a passage like this at this particular point in his commentary? I would suggest the following answer. It should be realized that the commentaries derive from the context of the teaching of philosophy in the school of Alexandria. In the curriculum the *Categories* was the first work of Aristotle to be discussed, after a general introduction to philosophy and Porphyry's *Isagoge*.⁴⁹ In his commentary on *Cat.* 2a11–14 Philoponus uses a classification of substances based on the distinction between simple and composite:

Of this substance [i.e., the substance which is primary among the categories] one kind is simple, the other composite. Of simple [substance] one kind is inferior to the composite, the other superior. Man and the like are composite substances; angel and soul and the like are simple and superior to the composite; first matter and the forms are inferior to the composite.

Here [in *Cat.* 5] Aristotle discusses neither the simple substance superior to the composite (for he is not discussing the divine—θεολογεῖν) nor the simple substance inferior to the composite (for he is not discussing nature—φυσιολογεῖν), but only the composite substance. Of this substance, he says, one kind is primary, the other secondary. He calls the particular substance primary, the universal substance in terms of species and genera⁵⁰ secondary (Philop. *In Cat.* 49.23–50.3).

In this classification forms are considered simple substances, and should be treated in a discussion of nature.⁵¹ In view of the curriculum we may assume that students who reached Philoponus' *Physics* commentary were acquainted with the division of substances in the *Categories* commentary. Though they would take it for granted that physical bodies are composite (see 144A 9) it might strike them as odd that Theophrastus would claim that physical forms are composite. An explanation was called for and therefore Philoponus inserted a paragraph pointing out that the relevant kind of composition is actually the compo-

⁴⁹ For the Neoplatonic curriculum see e.g. I. Hadot, *Simplicius. Commentaire sur les Catégories*, *Philosophia Antiqua* 50, fasc. I (Leiden 1990) 23–26.

⁵⁰ Note that species and genera are classified as composite substances, probably because of their being composed of (higher) genera and differentiae.

⁵¹ Cf. Philop. *In Cat.* 67.7–13; see also *In De An.* 207.34–209.4, where the human soul is equated with form on account of the division of a composite substance in form and matter.

sition of form and matter, not of form itself. If this little speculation has some truth in it, we would not even need to assume a corresponding paragraph in Theophrastus' *Physics*. However, as part of the reception of Theophrastus' thought in late antiquity Philoponus' paragraph on composition would still deserve its place in FHS&G.⁵²

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⁵² These investigations were supported by the Philosophy Research Foundation (SWON), which is subsidized by the Netherlands Organization for Scientific Research (NWO). I have made ample use of the Thesaurus Linguae Graecae CD-ROM (Irvine, California, US) together with the View&Find software by B. Meißner (Halle/Saale, Germany).

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9

Problèmes de composition et de classification dans l'*Historia plantarum* de Théophraste

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Les problèmes qui se posent à propos de la composition de l'*Historia plantarum* sont bien connus: l'ouvrage comprend dix livres selon Diogène Laërce,¹ neuf seulement dans les éditions modernes qui réduisent à l'unité les deux versions peu différentes de 9.8–20 copiées à la suite dans le cod. Vaticanus Urbinas gr. 61 (U);² plusieurs citations antiques n'appartiennent pas en l'état actuel du texte aux livres indiqués par leurs auteurs; l'authenticité du livre 9, de plus en plus volontiers admise, n'a pas encore été méthodiquement démontrée.

Les travaux des participants au Project Theophrastus, notamment ceux de M. Sollenberger, G. Wöhrle et A. Preus, ont abouti ces dernières années à des résultats substantiels qui seront rappelés plus loin. Si je

¹ DL 5.46. Voir M. Sollenberger, "Diogenes Laertius 5.36–57: The *Vita Theophrasti*", in *Theophrastus of Eresus: On His Life and Work* [RUSCH 2], ed. W. W. Fortenbaugh, P. Huby and A. Long, 1–62 (New Brunswick, NJ 1985).

² Voir M. Sollenberger, "Identification of Titles of Botanical Works of Theophrastus," in *Theophrastean Studies* [RUSCH 3], ed. W. W. Fortenbaugh and R. Sharples, 14–24; en part. n. 7, 8 et 9 (New Brunswick, NJ 1988).

reviens sur cette question, c'est parce que l'examen du texte auquel j'ai dû procéder pour donner une édition de l'*HP*³ répondant aux exigences de la philologie moderne m'a d'une part convaincue de la liaison étroite entre la composition du traité et la classification des végétaux étudiés, et a d'autre part attiré mon attention sur un ensemble de renvois internes, de "réclames" et de scholies qui mérite une étude approfondie.

Une première hypothèse peut être écartée tout de suite, celle de la perte d'un livre dont il ne resterait de trace que dans le décompte de Diogène.⁴ La tradition indirecte fournit des références à *neuf* livres et une citation de *HP* 9.17.3 dans Apollonius, *Hist. mir.* 50, situe le passage en *tôi Peri phutôn, en tēi eschatēi* (scil. *biblōi*) *tēs pragmateias*, ce qui prouve que vers 200 avant notre ère les différentes parties de l'ouvrage étaient déjà réunies en un traité (*pragmateia*) dont le dernier livre était notre livre 9.

Pour faire correspondre ces neuf livres aux dix livres de Diogène, Regenbogen⁵ a supposé une série continue de sept livres: 1, 2 a (= 2.1–4), 2 b (= 2.5–8), 3, 6, 7, 8, prolongée par un groupe de trois livres traitant de questions annexes: 4 (les végétaux dans leurs conditions de vie), 5 (le bois et ses usages), 9 (les drogues d'origine végétale), présentés dans cet ordre ou bien 9 précédant 4 et 5. Cette solution, que M. Sollenberger a d'abord retenue⁶ avant de marquer son scepticisme,⁷ ne résiste pas à l'examen. L'argument de Regenbogen en faveur de sa thèse est que 2 a (= 2.1–4) constitue un exposé général pourvu d'une petite conclusion ("Voilà donc les données sur lesquelles doit se fonder l'étude des procédés de reproduction et des mutations"), tandis que 2 b (= 2.5–8) et 3, qui traitent respectivement des arbres cultivés et des

³ Sous le titre *Recherches sur les plantes*, 3 tomes parus (Paris 1988–1993).

⁴ Alors que G. Wöhrle, à la suite de G. R. Thompson (*Theophrastus On Plant Flavors and Odors. Studies on the Philosophical and Scientific Significance of De Causis Plantarum* VI [Diss. Princeton 1941] 17–21), a reconnu dans le *De Odoribus* le livre 8 qui manquait au *De causis plantarum* ("The Structure and Function of Theophrastus' Treatise *De Odoribus*," *RUSCH* 3, 5–13; U. Eigler und G. Wöhrle, *Theophrast De odoribus* [Stuttgart 1993] 11), aucun des opuscules botaniques en un livre répertoriés par Diogène (cf. Sollenberger [1988] 14–15 et 20–21) ne paraît avoir de rapport étroit avec le sujet de l'*HP*.

⁵ O. Regenbogen, "Theophrast-Studien I: Zur Analyse der *Historia Plantarum*," *Hermes* 69 (1934) 75–105 et 190–203, en part. 202–3; article "Theophrastos," *RE* Suppl. VII (1940) 1354–1562, en part. 1373 et 1439.

⁶ *Supra* n. 1, 51: "The present Book Two of *HP* was originally two separate books, so that the listing of ten books by Diogenes is easily explainable."

⁷ *Supra* n. 2, 15–16.

arbres sauvages, font partie des *kath' hekaston logoi* et peuvent avoir formé deux livres distincts. Certes, le passage du général au particulier est incontestable, mais le livre 2 tout entier se rapporte au même sujet: la reproduction des végétaux et principalement des arbres. Il est naturel qu'à cet égard les arbres cultivés soient examinés plus longuement que les espèces sauvages, qui se reproduisent presque exclusivement par graine (3.1). Ainsi 2.5 et 2.6 concernent les techniques de plantation, 2.7 et 2.8 les soins à donner aux arbres pour les faire fructifier, plantation (ou semis) et fructification représentant le point de départ et l'aboutissement du cycle végétatif. Hormis la digression sur les palmiers (2.6.6–11), que l'auteur reconnaît (2.6.12) comme telle ("Voilà un développement qui a débordé notre sujet"), le livre 2 a une unité thématique suffisante pour faire écarter l'hypothèse d'une bipartition, si celle-ci n'était pas démentie par ailleurs. Or une phrase que nous lisons en 2.5.5,⁸ donc dans ce qui serait 2 b selon Regenbogen, à savoir le

⁸ "Le figuier, planté dans une scille, pousse plus vite et il est moins mangé des vers; en règle générale, tout plançon mis dans une scille reprend bien et croît plus vite." Athénée attribue également au livre 2 quatre citations (77A; 77E [début]; 77F; 82E) sans correspondance avec le texte actuel, mais bien en rapport avec le sujet du livre puisqu'elles évoquent la fructification du figuier et d'autres arbres de verger. Par ailleurs ces discordances, et d'autres analogues, prouvent que deux siècles et demi après l'édition d'Andronicos une version plus complète de l'*Historia* restait en usage. Le jeune Athénée de Naucratis ayant nécessairement fréquenté la bibliothèque d'Alexandrie, il est vraisemblable qu'il avait lu Théophraste dans un exemplaire alexandrin, sinon dans une "édition" alexandrine dont l'existence est problématique (Regenbogen, *RE* 1374). Comme toutes les citations d'Athénée comportant la mention du livre se trouvent effectivement dans le texte de nos manuscrits au livre indiqué (hormis le cas de discordance signalé plus haut), on peut supposer pour l'actuel découpage en neuf livres une origine alexandrine. Rien d'étonnant à ce qu'Andronicos l'ait repris à son compte et en quelque sorte officialisé: on sait que l'école de Rhodes entretenait avec Alexandrie des relations très étroites pendant toute la durée de la domination ptolémaïque (P. Moraux, *Les listes anciennes des ouvrages d'Aristote* [Louvain 1951] 231). Peut-être même un autre argument pourrait être invoqué en faveur de cette hypothèse. Stéphane de Byzance, s.v. *Apsunthos*, se réfère à *HP* 9.17.4 en ces termes: *en tōi Peri phutōn enatōi*. Si la source de Stéphane est Bolos de Mendès (1^{re} moitié du 3^e siècle a.C.) et que la référence vienne telle quelle de cette source, "Bolos connaissait déjà la seconde partie de notre *HP* 9 comme le neuvième livre d'un *Peri phutōn*" (R. Sharples, *in litteris* à la suite d'une remarque de P. Kingsley). Or Bolos, Grec d'Égypte et plus précisément du Delta, comme Athénée, devait lui aussi son érudition à la bibliothèque d'Alexandrie. Dans ces conditions, je ne crois pas trop hasardeux d'invoquer au sujet de *HP* 2.5.5 le témoignage d'Athénée contre la théorie de Regenbogen qui, semble-t-il (ce n'est pas dit expressément), voit dans l'unification du livre 2 une innovation d'Andronicos.

troisième livre, est citée par Athénée (77E) comme un extrait du livre deux.

Déjà J.G. Schneider avait exposé dans le Supplément (1821) de son édition⁹ une tentative analogue pour diviser en deux l'actuel livre 4: à la suite de Hahnemann, *De helleborismo veterum*, p. 10, Schneider souligne le manque de cohésion du livre 4, dont la seconde partie (ch. 13–16), relative à la longévité des arbres et à leur pathologie, se raccorde mal à la première (ch. 1–12) qui décrit des végétaux liés à un milieu particulier; d'où l'idée que ces deux parties constituaient les livres 4 et 5 de Diogène. Il est vrai qu'à première vue notre livre 4 s'intègre assez mal au plan général de l'ouvrage, fourni par la classification des végétaux selon les quatre formes biologiques: arbre, arbrisseau, sous-arbrisseau, plante herbacée (cf. *HP* 1.3.1).¹⁰ Mais la priorité accordée dans ce livre aux considérations écologiques est clairement annoncée dès le premier chapitre: (4.1.1) "Toutes les plantes sans exception (*hapanta*) deviennent plus belles et prospèrent davantage dans les milieux qui leur conviennent (*en oikeiois topois*)"; (4.1.5) "Chaque plante (*hekaston*) recherche une situation et un climat à sa convenance (*oikeian*)."¹¹ Ainsi avertis, nous ne devons pas nous étonner de trouver par exemple parmi les plantes de l'Inde (4.4) des céréales à côté de végétaux ligneux, ou même un chapitre entier (4.9) consacré à une petite plante herbacée aquatique, la châtaigne d'eau. Du reste, une fois décrites les espèces propres à des climats ou à des milieux particuliers, Théophraste revient à sa classification principale, de sorte que les chapitres 13–16 concernent les arbres et l'actuel livre 5 le bois. En fait, comme l'a bien montré G. Wöhrle,¹¹ notre livre 4 est constamment dominé par la considération des influences qui s'exercent sur les végétaux: climat, milieu, atteintes diverses (maladies, parasites, accidents météorologiques ou provoqués par l'homme). Ainsi les interférences des classifications mises en oeuvre¹² suffisent à expliquer

⁹ *Theophrasti Eresii quae supersunt Opera et Excerpta Librorum*, 5 tomes (Leipzig 1818–1821); voir 5:233–34. L'hypothèse de Hahnemann reprise par Schneider est signalée dans M. Sollenberger, "Identification of Titles of Botanical Works of Theophrastus," *RUSCH* 3, 22 n. 5.

¹⁰ Sur ce type de classification, voir S. Atran, "The Nature of Folk-Botanical Life Forms," *American Anthropologist* 87 (1985) 298–315.

¹¹ *Theophrasts Methode in seinen botanischen Schriften* (Amsterdam 1985) 34–35 et surtout 40.

¹² Interférences signalées dans l'Introduction de mon édition, XXXI.

les anomalies apparentes de la composition, sans qu'il y ait lieu de supposer une division primitive en deux livres. Quant à la tradition indirecte, elle fournit plusieurs références explicites au livre 4, dont on ne peut rien tirer pour ou contre la suggestion de Hahnemann, car aucune n'a trait aux chapitres (13–16) présumés réunis à l'origine en un livre distinct.¹³ Des citations accompagnées de la mention du livre, aucune ne se rapporte non plus au livre 5, mais celles de notre livre 6 sont toutes exactement situées "au livre six," *en (tôi) hektôi*,¹⁴ et non "au livre sept" comme l'exigerait l'hypothèse de Hahnemann. Nous avons donc la quasi-certitude que les six premiers livres étaient dès l'origine délimités entre eux et classés comme ils le sont dans nos manuscrits.¹⁵

Avec le livre 7 apparaît un nouveau problème, magistralement posé et résolu par J. Keaney,¹⁶ quoique certains détails semblent avoir échappé à son attention. À l'inverse de Diogène, qui majore d'une unité le nombre actuel des livres, Apollonius, Harpocrate et Galien citent l'*HP* dans une édition en huit livres dont le septième correspond à notre livre 8, le huitième—et dernier—à notre livre 9.¹⁷ J. Keaney a vu l'explication de ce nouveau décalage dans une scholie que les manuscrits où elle figure présentent à la limite des livres 7 et 8. Il importe donc de la décrire avec la plus grande précision. Dans le Vaticanus Urbinas gr. 61 (U), le dernier mot du livre 7 est immédiatement suivi d'une croix; puis se succèdent dans l'ordre normal de la lecture, après un trait horizontal de séparation, (1) la souscription du livre 7: *Theophrastou Peri phutôn historias to ê* (*ê* = 7 là où les numéros des livres sont indiqués par des lettres¹⁸); (2) sur deux lignes dont la première commence par une croix,

¹³ On a déjà plusieurs fois remarqué que le passage situé par Harpocrate, *Lex.*, s.v. *holoschoinôi*, en d' *Peri phutôn*, se trouve effectivement en 4.12.1 (cf. J. Keaney, "The Tradition of Theophrastus' *Historia Plantarum*," *Hermes* 96 (1968) 293–98, en part. 295; M. Sollenberger, *RUSCH* 3, 22 n. 6). Les références suivantes permettent de faire la même constatation: Athénée, 77B–C, en *tôi tetartôi tês Phutikês Historias* = *HP* 4.2.3; 83 d–f, en *tôi tetartôi tês Peri phutôn Historias* = 4.4.2–3; 651 a, en *tetartôi Peri phutôn* = 4.10.7; scholie à Nicandre, *Alex.* 99, en *tôi tetartôi tôn Phutikôn* = 4.2.5.

¹⁴ Athénée, 70D = 6.4.10–11; 679B–C (bis) = 6.8.3; 681E = 6.6.9; 682B = 6.6.4–5.

¹⁵ Pour les renvois internes d'où il ressort que le livre 4 précédait le livre 6 dès l'origine, voir G. Wöhrle, *Theophrasts Methode* (*supra*, n. 11) 36.

¹⁶ Cf. *supra*, n. 13.

¹⁷ Apollonius, *Hist. mir.* 33, en *tôi z' (7) Peri phutôn* = 8.4.5; *ibid.* 41, en *tôi ê' (8) Peri phutôn* = 9.18.2; Harpocrate, *Lex.*, s.v. *melinê*, en *z' (7) Peri phutôn* = 8.1.1 et 4; Galien, *De Fac. Alim.* 237.20 Helmreich (= 6.516 Kühn), en *hebdomôi Peri phutôn* = 8.9.2; *Lex. hipp.* s.v. *akonê* (19.72 Kühn), en *tôi Peri phutôn ogdoôi* = 9.20.4.

¹⁸ Les codd. U et M, ainsi que l'Aldine, ont ce système alphabétique; dans P, comme

à gauche *Hermippos de Peri phru | ganikôn kai poiôdôn*, à droite *Andronikos de Peri | phutôn historias*; (3) dans la marge, *th* (= 8 dans le système alphabétique); après un second trait de séparation commence le texte du livre 8. Le Laurentianus 85,22 (M) ne reproduit pas ce dispositif et donne seulement le titre du livre 8 (... *to th*). En revanche, le Parisinus gr. 2069 (P) et l'Aldine (éd. princeps, 1497) font état dans une note¹⁹ de la scholie, qu'ils rapportent expressément au livre huit: "Il faut savoir que le huitième livre²⁰ du *Peri phutôn* de Théophraste est intitulé selon Andronicos *Peri phutôn historias*, selon Hermippe, *Peri phruganikôn kai poiôdôn*." A première vue, le livre 8, qui traite des céréales et des légumineuses, donc de plantes herbacées, semble bien en effet devoir être rattaché aux livres réunis dans les listes d'Hermippe²¹ sous le titre "Sous-arbrisseaux et plantes herbacées." Nos livres 6, 7 et 8, qui ont une unité thématique certaine puisqu'ils concernent les deux dernières formes biologiques étudiées, auraient donc formé à l'époque d'Hermippe un volume distinct. Cette opinion, que j'ai moi-même soutenue,²² me paraît maintenant devoir être écartée pour la raison suivante. Il faut noter, dans le passage de 7 à 8, l'emploi de la "réclame," le livre 7 se terminant par une phrase reprise en tête du livre 8, avec la variante *eirêsthô* au lieu de *eirêtai* et quelques autres changements.²³ Ce procédé, très ancien, servait à assurer le lien entre les livres d'une oeuvre dont chacun occupait un *volumen* de papyrus.²⁴ Le livre 8 étant donc à l'origine séparé matériellement du ou des précédents, le titre partiel transmis par Hermippe s'applique seulement aux livres 6 et 7, qui traitent en effet des sous-arbrisseaux et des plantes herbacées (les végétaux coronaires du livre 6 appartenant aux deux types, les légumes du livre 7 au dernier). De la réunion sous le même titre des livres 6 et 7, étroitement liés par leur contenu, J. Keaney a conclu que leur ensemble devait constituer le sixième livre de l'édition

dans le décompte de Diogène, sont utilisées les lettres accentuées tenant lieu de chiffres, avec l'*episêmon* correspondant à 6.

¹⁹ Note infrapaginale dans P, placée au-dessous du titre (... *to th*) dans l'Aldine.

²⁰ "*to êon*" dans P, "*to ogdoon*" dans l'Aldine.

²¹ Sur le rôle d'Hermippe dans l'inventaire du *Corpus aristotelicum*, voir en particulier Regenbogen 1940, 1363–70; P. Moraux 1951, 222 et 246–47.

²² Dans l'Introduction de mon édition, XLIII n. 84.

²³ Voir A. Hort, *Theophrastus Enquiry into Plants*, t. 2 (Cambridge, Mass. 1926; repr. 1977) 138 et 142.

²⁴ Je remercie vivement le Professeur Jean Irigoin pour ces précieux renseignements codicologiques.

en 8 livres utilisée par Apollonius, Harpocraton et Galien; le découpage actuel et le titre définitif de l'ouvrage proviendraient de l'édition d'Andronicos.

Cette explication me paraît très convaincante,²⁵ avec une réserve toutefois en ce qui concerne Galien. Les deux extraits de *HP* 8 reproduits dans son traité *De facultate alimentorum* sont situés l'un (237.20 Helmreich [6.516 Kühn] = *HP* 8.9.2) en *hebdomôî Peri phutôn*, l'autre (254.18 Helmreich [6.542 Kühn] = *HP* 8.3.2) en *tôi ogdoôi Peri phutôn historias*. On a peine à croire, avec J. Keaney, que Galien disposait des deux éditions successives de l'*HP* et qu'il les cite indifféremment dans le même ouvrage, sans souci d'égarer le lecteur. La disparate s'expliquerait mieux par l'utilisation d'un texte unique en neuf livres, dont le découpage primitif n'aurait pas été effacé: nous avons vu les incertitudes causées par la mention d'un ancien titre entre nos livres 7 et 8. Mais ce n'est là qu'un détail, qui ne remet pas en cause les conclusions précédemment exposées.

Revenons à la question, toujours pendante, du dixième livre pris en compte par Diogène. La "réclame" des livres 7 et 8 présente avec insistance le 8 comme le dernier de l'ouvrage: "Il faut passer à la question du blé et des céréales: c'est ce qui nous restait encore à étudier" (fin livre 7); "Traitions la question du blé et des céréales au même titre que les précédentes: c'est le reliquat des herbacées" (début livre 8). De fait, il n'y a aucune transition entre 8 et 9, et la matière du livre 9 (les végétaux producteurs de substances médicinales) n'est pas organisée selon les critères classificatoires de l'ensemble: forme biologique, habitat terrestre ou aquatique, état domestique ou sauvage. D'où l'opinion, souvent exprimée, que le livre 9 est apocryphe.²⁶

²⁵ Voir cependant *supra* la n. 8. Opinion favorable également de la part de G. Wöhrle 1985, 35.

²⁶ Quoique Dioscoride cite Théophraste (*HP* 9.11.11 en 3.74.4 et *HP* 9.17.3 en 5.108.2) sans paraître douter de l'authenticité du livre 9, l'édition de M. Wellmann, *Pedanii Dioscuridis Anazarbei De Materia Medica Libri quinque* (Berlin 1907-1914; repr. 1958) présente ces références à ce livre comme à un écrit apocryphe: [Theophr.]. A propos du concept de *rhiza* dans *HP* 9.8.1 H. Bretzl, *Botanische Forschungen des Alexanderzuges* (Leipzig 1903) 365, n. 23, parle aussi du Pseudo-Théophraste (tout en admettant l'authenticité des ch. 1-7; cf. 366 n. 24); de même H. Rahner, *Mythes grecs et mystère chrétien*, trad. Voirin (Paris 1954) 244. D'autres auteurs doutent de l'authenticité, mais sans vraiment prendre parti. Ainsi par exemple H. Marzell, "Der Zauber der Heilkräuter in der Antike und Neuzeit," *Südholfs Archiv für Geschichte der Medizin und der Naturwissenschaften* (1937) 3-26, en part. 5; A. Delatte, *Herbarius. Recherches sur le cérémonial usité chez les anciens pour la cueillette des simples et*

En réalité le texte même contient des indices de son authenticité et de son indépendance par rapport à l'ouvrage auquel il fut rattaché antérieurement aux plus anciens témoignages de la tradition indirecte.

On remarque dans *HP* 1–8, en face de très nombreux renvois internes du type banal: *hōsper/kathaper eipomen/elechthê/eirêtai*, deux occurrences isolées de *en allois*. La première se trouve à la fin du chapitre concernant les végétaux de l'Inde (4.4.14): "Ce qui est le plus extraordinaire dans le monde végétal et le plus radicalement différent du reste, ce sont les plantes à parfum d'Arabie, de Syrie et de l'Inde, par exemple l'encens, la myrrhe, la cannelle, le baume, le cinnamome et toutes les autres de ce genre, dont nous avons parlé ailleurs plus longuement (*peri hōn en allois eirêtai dia pleionōn*).” Il est certain que le développement visé n'appartient pas aux livres 1–8 de l'*HP*; par conséquent *en allois* signifie "dans un autre ouvrage," et non "dans un autre passage (de celui-ci)". Ainsi l'entend Bretzl,²⁷ pour qui cette phrase renvoie à "l'écrit antérieur et indépendant [*Peri osmōn*], qui constitue aujourd'hui le livre IX 1–7"—opinion peu contestable, même si l'examen des manuscrits oblige à modifier le titre proposé. La seconde occurrence apparaît dans *HP* 7.9.3, où les racines des plantes herbacées sont distinguées d'après les caractères morphologiques de texture, couleur, saveur, odeur: "... elles sont de saveur douce, amère ou âcre, d'odeur agréable ou fétide, et dans certains cas, douées de propriétés médicinales, comme nous l'avons déjà dit ailleurs" (*kai eniai pharmakōdeis, hōs en allois eirêtai*). Regenbogen²⁸ voit ici un rappel de *HP* 1.7.2 (*hai de kai pharmakōdeis*), sans se demander pourquoi *en allois* a été choisi de préférence à une formule telle que (4.2.1) *kathaper elechthê kai en tois ex archês*, ou (6.7.1) *hōsper elechthê kai kat'archas*. Comme il n'est guère vraisemblable que *en allois* ait un sens différent dans les deux cas, il est fait ici référence à un second ouvrage distinct de l'*HP* 1–8. Ce ne peut être que 9.8–20, dont le sujet englobe toutes les parties de la plante douées de propriétés médicinales, mais a trait particulièrement aux racines (cf. 9.8.1).

Voyons maintenant si les données codicologiques confirment ou non l'hypothèse qui fait de 9.1–7 et de 9.8–20 des écrits antérieurs à *HP* 1–8

des plantes magiques (Paris et Liège 1938) 8 (plutôt favorable à l'authenticité); J. Stannard, "The Herbal as a Medical Document," *Bull. Hist. Med.* 43 (1969) 213 ("Book IX of Theophrastus' *History of Plants* ... is possibly spurious").

²⁷ 1903, 327 n. 94. Voir aussi 366 n. 24.

²⁸ 1934, 78.

et primitivement indépendants l'un de l'autre, ainsi que par rapport à *HP* 1–8. Deux manuscrits sont particulièrement intéressants à cet égard. Le Monacensis gr. 635 (= Phillippicus 3085), dont les *excerpta* proviennent d'un manuscrit voisin de U et de valeur au moins égale,²⁹ présente ses extraits du livre 9³⁰ sous le titre *Theophrastou Peri phutôn opôn* placé au-dessous d'un bandeau décoratif qui sépare nettement la fin du livre *ê'* (= 8 dans le système numéral) de la suite. On trouve d'autre part dans U un livre *i* (= 9 dans l'ordre alphabétique) comprenant le texte de 9.1.1 à 9.20.5; puis, entre deux traits horizontaux, la souscription de *i* rapportée à ce qui précède par le système de deux croix indiqué plus haut pour la scholie du livre 7; enfin le titre *Peri dunameôs rhizôn*, suivi de la lettre *k* (= 10), et le texte de ce livre 10, qui répète avec quelques variantes les chapitres 8.1 à 19.4. Ainsi, même intégré à l'*HP*, notre livre 9 conservait dans certaines copies le titre partiel *Peri phutôn opôn* et il existait simultanément un *volumen* intitulé *Peri dunameôs rhizôn* qui contenait seulement la seconde partie du livre. Cette situation permet de comprendre que d'une part la tradition indirecte rapporte à *HP* 9 même les extraits de la seconde partie, et que d'autre part Diogène Laërce attribue à l'*HP* dix livres, le dernier correspondant au *Peri dunameôs rhizôn* de U.³¹

Nos manuscrits nous permettent de remonter plus haut dans l'histoire du texte, c'est-à-dire au moment où le livre 9 a été constitué, probablement assez tôt après la mort de Théophraste, pour faire partie de l'*HP*. Il est clair que si le titre *Peri dunameôs rhizôn* convient bien pour les chapitres 8–19 (20), celui de *Peri phutôn opôn*, qui introduit dans le Monacensis les extraits du livre 9, est plus approprié aux chapitres 1–7 qu'à l'ensemble du livre. Or la transition entre les chapitres 7 et 8 est de celles qu'on trouve dans l'*HP* entre des livres,³²

²⁹ B. Einarson, "The Manuscripts of Theophrastus' *Historia Plantarum*," *Class. Phil.* 71 (1976) 67–76, en part. 75.

³⁰ La partie conservée de la copie s'arrête à 9.9.1.

³¹ L'idée que le décompte de Diogène s'explique par la division du livre 9 en deux parties remonte, par-delà G. R. Thompson (1941, 11 et n. 20; 31 n. 35), à O. Kirchner, *De Theophrasti Eresii Libris Phytologicis* (Diss. Breslau, 1874) 42, selon M. Sollenberger (1988, 15 n. 11) qui se dit en définitive favorable à cette solution.

³² On comparera notamment le début de 9.8: "Au sujet des sèves (*Peri de tôn opôn*), tout ce dont nous n'avons pas parlé (*eirêtai*) précédemment, il faut tâcher pareillement de l'exposer (*peirateon homoiôs eipein*)," et celui du livre 3 (qui porte également dans U un titre partiel: *Peri agriôn dendrôn*): "Après avoir parlé des arbres domestiques (*Epei de peri tôn hêmerôn dendrôn eirêtai*), il faut en faire autant (*lektein homoiôs*) des arbres sauvages."

non entre des chapitres. Le livre 9 résulte donc de la réunion de deux opuscules, le premier en 7 chapitres, le second en 12, intitulés respectivement *Peri phutôn opôn* et *Peri dunameôs rhizôn*, la différence étant que l'existence indépendante du second sous son propre titre est seule formellement attestée par la tradition manuscrite.

La dernière question qui se pose est la suivante:³³ quand, comment et pourquoi Théophraste a-t-il composé ces monographies auxquelles il se réfère, nous l'avons vu, par la formule *en allois* et qui sont en effet fondamentalement étrangères à l'entreprise de classification des végétaux qu'est l'*HP*?

En ce qui concerne "les sèves des végétaux" (*Peri phutôn opôn*) ses principales sources sont facilement identifiables. Pour parler de la résine de pin et de la poix (9.2–3), il lui a suffi de puiser dans les informations qu'il avait lui-même recueillies sur l'Ida de Troade pendant son séjour à Assos, et en Macédoine, entre 347 et 335.³⁴ Sa documentation sur la myrrhe, l'encens et les aromates d'Orient lui a été fournie, comme la matière de plusieurs chapitres du livre 4,³⁵ par les naturalistes de l'expédition d'Alexandre. Plus précisément, W. W. Tarn³⁶ a reconnu dans *HP* 9.4.4³⁷ une allusion à la mission d'Anaxicrate, chargé par Alexandre en 324 de réaliser la circumnavigation de l'Arabie. La mention en 9.4.8 d'Antigone, à qui les Arabes avaient apporté du bois d'arbre à encens, donne comme *terminus ante quem* à la rédaction du *Peri phutôn opôn* l'entrée en vigueur du partage de Triparadeisos (321). Il semble donc raisonnable de placer cet opuscule peu après 320 et incontestable que la paternité en revient à Théophraste.

Les doutes sur l'authenticité du *Peri dunameôs rhizôn* sont à première vue mieux fondés. Ch. Singer³⁸ le tient avec raison pour un ouvrage

³³ Je me propose de la traiter plus longuement dans la notice du livre 9, au tome V de mon édition.

³⁴ Voir l'Introduction de mon édition, X–XI.

³⁵ Notamment 4.4 (plantes de l'Inde) et 4.7 (végétation des mangroves).

³⁶ W. W. Tarn, "Ptolemy II and Arabia," *Journ. Egypt. Arch.* 15 (1929) 9–25, en part. 13.

³⁷ "Ces gens ont raconté qu'au cours de la navigation le long des côtes qu'ils firent à partir du golfe des Héros, ils débarquèrent pour aller chercher de l'eau dans la montagne et observèrent à cette occasion les arbres et leurs produits" (i.e. la myrrhe et l'encens). A rapprocher d'Arrien, *Inde*, 43.7 et de Strabon, 16.4.4, qui livre le nom d'Anaxicrate.

³⁸ Ch. Singer, "The Herbal in Antiquity and its Transmission to Later Ages," *JHS* 47 (1927) 1–52; voir 2–3.

d'un niveau moins élevé que l'*HP* et note que les chapitres 9–12 sont conçus à la manière des “herbiers” de tradition alexandrine. Les plantes y sont sommairement décrites, mais les homonymes soigneusement distingués, comme pour éviter des confusions aux utilisateurs, et leurs propriétés médicinales plus détaillées que leurs caractères botaniques. A la suite des travaux de M. Wellmann et de J. Scarborough,³⁹ on admet aujourd'hui que le *Peri dunameôs rhizôn* s'inspire largement de l'“herbier” de Dioclès de Carystos, enrichi avec les informations recueillies par Théophraste auprès des ramasseurs de simples et des “pharmaciens” de sa connaissance.⁴⁰ Le renvoi à cet opuscule au moyen de *en allois* dans *HP* 7.9.3 indique son antériorité à l'*HP*. Il est tentant de le situer au début de la carrière de Théophraste au Lycée: une fois atteinte la hauteur de vues que suppose la classification des végétaux selon des critères encore en usage de nos jours,⁴¹ le botaniste ne serait certainement pas revenu à la perspective utilitaire d'un “herbier.” Toutefois les références aux deux opuscules dans l'*HP* prouvent que leur auteur ne les avait pas reniés. Ils n'ont pas non plus paru indignes du maître aux yeux du disciple ou du successeur inconnu qui les a réunis à l'*Historia plantarum*.⁴²

³⁹ M. Wellmann, “Das älteste Kräuterbuch der Griechen,” in *Festgabe für Franz Susemihl* (Leipzig 1898), en part. 22–31; J. Scarborough, “Theophrastus on Herbals and Herbal Remedies,” *Journal of the History of Biology* 11 (1978) 353–85.

⁴⁰ Voir A. Preus, “Drugs and Psychic States in Theophrastus' *Historia Plantarum* 9.8–20,” *RUSCH* 3, 76–99, en part. 94 n. 2.

⁴¹ La classification selon les formes biologiques (d'une part arbres et arbrisseaux, d'autre part sous-arbrisseaux et plantes herbacées) a été adoptée pour la *Flore forestière française* de J.-C. Rameau, D. Mansion, G. Dumé et al., en cours de publication à l'Institut pour le Développement Forestier, 2 tomes parus (Paris 1989–1993); t. 3 à paraître.

⁴² Je dois au Professeur R. W. Sharples des remarques et des précisions fort utiles. Qu'il en soit cordialement remercié.

10

Is Theophrastus a Significant Philosopher?

Richard Sorabji

I happened to go (a little later) to the same school as the English playwright John Mortimer. He describes the sex education offered in his time at that school in his play *A Voyage Round My Father*:

Another thing! Simply this. When sleeping always lie on the right side. Not on the face for obvious reasons. Not on the back. Brings on dreams. Not on the left side. Stops the heart. Just the right side ... all the time.

“Not on the back. Brings on dreams.” I am indebted to Michael Sollenberger, at an earlier Theophrastus Conference in 1989, for revealing that this advice on avoiding “wet dreams” goes back to section 16 of Theophrastus *On Fatigue*. Theophrastus’ influence is pervasive, although it is not for this reason that I have been inclined to see him as a significant philosopher.

His importance itself has different dimensions. I see him as having good philosophical ideas, again as being original enough to diverge widely from Aristotle, and also in some cases as being influential on posterity. But he was not seen that way in antiquity. Cicero, Boethius and Simplicius described him respectively as one who “handles topics previously handled by Aristotle,” who “touches lightly on those things which he knows to have been said by Aristotle” and who “follows

Aristotle in almost everything.”¹ The following authoritative modern judgment would, at least until recently, have been widely accepted: “A scientific researcher and scholar rather than a speculative philosopher, he pursued his researches on topical and methodological lines already laid down by Aristotle.”² Again: “Empirically minded, a researcher rather than a philosopher, Theophrastus continued Aristotle’s work, modifying some of its more speculative aspects.”³ Another writer has seen virtually all his judgments and material as derived from Aristotle.⁴

One way in which Theophrastus may have been influential I have not researched at all. But I mention it, in the belief that someone else will be able to confirm or disconfirm the idea. To what extent did Theophrastus set the agenda that Hellenistic philosophers thought it necessary to cover? Of course, the Greeks had written before on love, marriage and drunkenness from Homer and Hesiod to Plato and Aristotle. But to what extent had they discussed marriage, drunkenness and so on, in separate treatises devoted just to that subject?

I have written earlier in praise of Theophrastus’ ideas on God, place and motion.⁵ Since then, criticisms and alternative interpretations have appeared. So I will not repeat my earlier ideas, so much as take stock of the conclusions that can be drawn for Theophrastus’ importance in the light of that discussion. I shall then go on to a fresh context, Theophrastus on the killing of animals, in the hope of bringing out his importance again. Since my evidence will be drawn nearly all from the fragments, I intend this to serve as a celebration of the compilation of the *Sources* by FHS&G.

God

It is almost unanimously agreed that Theophrastus dispensed with Aristotle’s divine unmoved mover, and thought the movement of the heavens sufficiently explained by their being animate and having a

¹ Cicero *De Fin.* 1.6 (50 FHS&G); Boethius *In Int.* 12.9–12 Meiser (72A FHS&G); Simplicius *In Phys.* 789.4f. (151B FHS&G).

² John Keaney, in *The Oxford Classical Dictionary*.

³ Anthony Flew, *A Dictionary of Philosophy*.

⁴ I. B. McDiarmid, “Theophrastus on the Presocratic Causes,” *HSCP* 61 (1953) 85–156.

⁵ Richard Sorabji, “Theophrastus on Place,” in *RUSCH* 3 (1988) 139–66; *Matter, Space and Motion* (London and Ithaca 1988) (= *MSM*) 158, 192–204, 213–14, 223.

soul.⁶ This is shrewd: Aristotle had opened himself to such an outcome by allowing in *Physics* 8.5 that soul can act as the unmoved mover.⁷ It is only in the very last chapter of the *Physics* (8.10) that he adds that the source of infinitely long motion cannot be housed in a finite body (and hence cannot presumably be celestial soul after all). It is tantalising that we do not know why Theophrastus does not accept this final argument. The effectiveness of his case against Aristotle does depend on whether he had an answer.

Whether effectively argued or not, the departure from Aristotle is a major one, in that Aristotle's theology is important to his whole philosophy. Robert Sharples has warned us that not everyone might agree; Jonathan Barnes allows only two out of eighty-eight pages to Aristotle's theology.

Admittedly, Barnes is apocryphally credited with the witticism that Aristotle's *Metaphysics* is exhausted by the two subjects of logic and astronomy—theology thus being excluded. But in fact Barnes' two pages do give weight to Aristotle's theology, the qualification being that his god is too impersonal for a religious person's worship.⁸ It is true that Aristotle's writing is not permeated with religious sentiment, but God, I believe, plays a central role in the strategy of his philosophy.

Theophrastus' departure is not only a significant one; I think it was influential. Theophrastus' successor Strato also dispensed with Aristotle's unmoved mover.⁹ I have argued that this is why the Stoics did not need to attack the unmoved mover: the Aristotelian school had abandoned him.¹⁰ My strategy here depends on the claim that the Stoic school did not ignore Aristotle's ideas generally, as has been claimed,¹¹ but rather selectively. For they devoted close attention to Aristotle's denial of motion in a vacuum in *Physics* 4.8, and strenuously combatted it. If I am right, total ignorance will not explain their silence on other Aristotelian doctrines: his unmoved mover, his account of place, his belief in natural places. All these were ignored precisely because the

⁶ Theophr. *Met.* 8 9b1ff.; Proclus *In Tim.* 2.120.8ff. Diehl (= 159 FHS&G).

⁷ Arist. *Phys.* 8.5, 258a7, a19.

⁸ Jonathan Barnes, *Aristotle* (Oxford 1982) 63–65.

⁹ Strato *ap. Cic. Acad. Pr.* 2.38.121 (= Fr. 32 Wehrli).

¹⁰ *MSM* Ch. 9, esp. 158.

¹¹ F. H. Sandbach, *Aristotle and the Stoics* (Cambridge 1985) [= Cambridge Philological Society, Suppl. Vol. 10].

Aristotelian School had abandoned them. It is the way of philosophers to engage dialectically with views that are actually held.

Place and Motion

Strato rejected not only the unmoved mover, but also Aristotle's account of place,¹² and his belief in natural places.¹³ All bodies tend to fall. Fire and air do not rise to any natural upper place, they are *squeezed up*. Strato's denials follow the doubts, or *aporiai*, already raised by Theophrastus both about Aristotle's account of place and, on the view I have elsewhere put forward, on natural places.¹⁴ Theophrastus, then, may well have influenced the agenda of the rival Stoic school again.

But there are now on the table impressive interpretations of Theophrastus on place and natural place which rival the one I put forward. Not only have David Sedley and Robert Sharples questioned some of my suggestions,¹⁵ but Keimpe Algra has offered a detailed rival account.¹⁶ Without trying to decide which interpretation is the best, we can consider what standing the different interpretations offer to Theophrastus. I think it will emerge that he is important on any of the interpretations, although important in different ways.

Aristotle had refused to define place as a three-dimensional extension. It is rather the surface of a thing's immediate surroundings, a surface which he sometimes requires to be immobile. Theophrastus assembles five puzzles for this conception of place in one of the two fragments on place that are left to us:

Remember that in his *Physics* even Theophrastus raises puzzles (*aporei*) such as the following against the definition of place given by Aristotle:

- (i) A body will be in a surface.
- (ii) Place will be in motion.
- (iii) Not every body will be in a place—not the sphere of the fixed stars.
- (iv) If the spheres are taken together, the heavens as a whole will also not be in a place.

¹² Simpl. *In Phys.* 601.24; 618.24.

¹³ Strato Frr. 50–52 Wehrli = Simpl. *In Cael.* 267.29; 269.4; Stobaeus *Anth.* 1.14.1 (= *Dox. Gr.* 311).

¹⁴ *MSM* Chs. 11 and 12.

¹⁵ David Sedley, unpublished reply to my paper in *RUSCH* 3 (1988); R. W. Sharples: the paper published in the present volume is one of a series. I have also benefited from his detailed paper delivered in 1988 to the Cambridge Philological Society.

¹⁶ Keimpe Algra, "'Place' in Context: On Theophrastus Fr. 21 and 22 Wimmer," in *RUSCH* 5 (1992) 141–65.

- (v) Things in a place will no longer be in a place if, without their changing themselves at all (*mēden auta metakinēthenta*), their surroundings (*periechonta*) are removed.¹⁷

I was originally hesitant what importance this fragment should lead us to attribute to Theophrastus. But I was hesitant for a particular reason. It does not matter that the five points are raised only as doubts. The puzzles are extremely important, and would still be so, even if Theophrastus had, like Aristotle's other pupil Eudemus, left us purported answers to them. One thing about the puzzles is that they are extremely difficult to answer, although I will not repeat here my attempt to show this. Aristotle himself foresaw, and tried to answer, two of them, and later philosophers also sought answers. But they seldom convince each other or us. I have suggested that the puzzles may have opened the way for other Greek philosophers to revert to the more obvious view of place as a three-dimensional extension. That they felt free to do so is all the more striking when we see that the Latin middle-ages found it much harder to escape from Aristotle's peculiar view of place as a surrounding surface, and even Descartes, in breaking away, is repeatedly pulled back towards Aristotle.

My reason for doubt about Theophrastus' role was that he did not invent all the puzzles, and possibly not any.¹⁸ (iii) and (iv) had been foreseen by Aristotle, while Eudemus has answers relevant to (ii), (iii), (iv) and (v). Theophrastus' main service may have been assembling the puzzles rather than inventing them. But we do not have to conclude that he was drawing on Eudemus. It is equally possible that, whether by assembling or by inventing, he provoked Eudemus to seek answers. If he did, that will have been an important service.

Eudemus certainly deserves credit, especially for his contribution on the immobility of place. It is this immobility that is in question in puzzles (ii) and (v); if those puzzles are attacking Aristotle's requirement that the surrounding surface or *peras* which constitutes something's place should be *immobile*. In Aristotle's universe of rotating celestial spheres and fluid fire, air and water, it is hard to find immobile surfaces. Eudemus can provide an answer to one part of the problem by using Aristotle's point that in merely rotating, a sphere does not

¹⁷ Simpl. *In Phys.* 604.5–11 (= 146 FHS&G).

¹⁸ *MSM* Ch. 11.

leave its place, and hence can still be seen as motionless.¹⁹ As for the boat stationary in flowing water, we can explain the immobility of its place eventually by reference to the fact that the heavens do not change their place.²⁰ This last is a very important move. I previously thought that appeal to fixed distances from fixed points in the heavens was an advance achieved only in the middle ages. But it is foreshadowed in Eudemus. What the Eudemus fragments still do not tell us is the sense in which the water surface surrounding a *moving* boat can be thought of as immobile, as Aristotle's words seem to require. His answers on the other points concerning immobility are quoted in his own words. The surface or boundary (*peras*) that constitutes a thing's place must be the boundary of surroundings which are *not* moved (*akinêtos*), he says,

for what is *moved* (*kinoumenon*) is like a *vessel* [*sc.* not like a place], and for that reason for *places* we make reference to the heaven. For the heaven does not change any *further* place, unless in respect of its parts, since its rotation is in one and the same place.

In other words, the rotating heaven, as immobile, provides the ultimate reference by which we can call a thing's surroundings immobile. Eudemus then goes on to the subject of (iii) and (iv), with the words: "But is it [*sc.* the heaven] itself in place, or not? ..."

Theophrastus does have a contribution of his own to make on puzzle (v). Aristotle, following Plato, had insisted that there is no such thing as change in respect of relations like being shorter, because it is possible that, without a thing's *changing at all* (*mêden metaballon*), it becomes shorter when something else grows taller than it.²¹ At least there is no change except accidental change, which he has agreed to dismiss.²² The example of growing shorter is Plato's, not Aristotle's. Simplicius is worried by Aristotle's denial, and interprets Theophrastus as allowing genuine change in all categories, including that of relatives.²³ Whether or not this ascription is correct, Theophrastus is surely sharpening up difficulty (v) for Aristotle by reference to the idea of relational change. Loss of place, according to (v), can occur like relational change, *without*

¹⁹ Simpl. *In Phys.* 595.8.

²⁰ Simpl. *In Phys.* 595.6–9.

²¹ Arist. *Phys.* 5.2, 225b11–13; Plato *Theaet.* 155B–C.

²² Arist. *Phys.* 5.1, 224b27.

²³ Simpl. *In Phys.* 412.31–413.9 (153B FHS&G); 860.19–861.4 (153C); 861.19–26; *In Cat.* 435.28–31 (153A).

things themselves changing at all (*mêden auta metakinêthenta*). This is surprising, because loss of place sounds even more drastic a change than change of place. Since the latter is sharply distinguished by Aristotle from a merely accidental change of relation, one would expect the former to be as well.

I have not previously explained clearly enough my interpretation of (v). Things will lose their place, given Aristotle's definition of place, if the surface of their immediate surroundings is moving. They will then (absurdly) have no place at all. And this can happen very easily, it seems, if the water is flowing past a moored boat, or the air past a standing person. Eudemos' counter-strategy may be to see the surface of the surrounding air as stationary after all, because the totality of air between here and the heavens is stationary in relation to the heavens which do not move, but only rotate.²⁴ In my interpretation, I am taking it that the surroundings of the person are removed, only in the sense that the air flows past the person, not in the sense that the person is left with no surroundings at all. My reason for ruling out the last is that it is hard to see what it would mean, unless it meant creating a vacuum around the person. But in raising a puzzle against Aristotle, it would be ineffective to show that absurdities resulted from creating a vacuum. For Aristotle would think that that merely confirmed the impossibility of a vacuum, rather than putting pressure on his definition of place.

The remaining fragment of Theophrastus on place²⁵ has been taken in very different ways, but ways which equally bring out the interest of Theophrastus.

Theophrastus, too, appears to have had this conception of place in his *Physics* when he continues his account in the form of a puzzle (*hos en aporiâi*), and says:

Perhaps (*mêpote*) place (*topos*) is not a reality in its own right (*kath' hauton ousia tis*), but we speak of it because bodies have an order and position (*taxis, thesis*) through their natures and powers (*phuseis, dunameis*). And similarly in the case of animals and plants and in general of non-homogeneous things, whether animate or inanimate, if they have a nature that exhibits form (*emmorphos phusis*). For in these, too, there is an order and position

²⁴ Eudemos would thus be shoring up the kind of interpretation of Aristotle that Myles Burnyeat offers in "The Sceptic in His Place and Time," in *Philosophy in History*, ed. Richard Rorty, J. B. Schneewind and Quentin Skinner (Cambridge 1984) n. 15, discussed *MSM* 189–90.

²⁵ Simpl. *In Phys.* 639.13–22 (149 FHS&G).

of parts in relation to the whole being (*ousia*). And this is why everything is said to be in its own space (*chôra*) through having its proper order. For each part of the body, too, would desire and demand its space and position.

On the strength of the reference to natures and powers, I have interpreted this fragment as raising a puzzle only for Aristotle's idea of natural place.²⁶ The four elements are supposed by Aristotle to have natural places, to which they naturally move, so that earth tends to the bottom, fire to the top, and water and air in between. Place is thought of by some people, and Aristotle expresses no dissent, as having some power (*dunamis*) in effecting natural movement.²⁷ On my interpretation, Theophrastus suggests that the reason why earth falls and flames rise need not after all be the power of natural places. A head pulled sideways reverts to its natural place on top of our body, not because of some power invested in a place. Rather, all power should be attributed to the organism itself which has a natural arrangement with the head on top. Similarly, displaced rocks fall and flames rise, not because of the power of any place, but because the cosmos is like an organism in which the parts tend to preserve their proper arrangement in relation to *each other*.

I take it that the places in question are those of the cosmic elements as well as those of the parts of animals, plants and inanimate bodies. At any rate, the places of these last three are introduced by way of comparison, to throw light on the case with which Theophrastus starts.

If this interpretation should be right, not only is Theophrastus' rival suggestion extremely clever, but it may also have been influential. I have already made the point that it could have encouraged Strato to deny natural place altogether, and could have affected the agenda of the rival Stoic school, which no longer needed to attack natural place. But there is a further point. Theophrastus will have taken a large step towards, and may have encouraged, the Stoic view. The early Stoics go beyond Theophrastus when they say that the cosmos actually *is* an organism.²⁸ But they are like Theophrastus in making bodies move because of a power lodged in *bodies*, not in places. In Chrysippus' view, bodies tend to the centre because of the holding-power (*hexis*) that derives from centripetal motions in the all-pervasive *pneuma*. And

²⁶ Arist. *Phys.* 4.1, 208b11.

²⁷ *MSM* 202–4.

²⁸ Cicero *De Nat. Deor.* 2.29–30.

Chrysippus sounds still more like Theophrastus, when he says, in the context of discussing motion towards the centre, that the parts of the cosmos exist only as parts of the whole, that any part is naturally united (*sumphues*) with the rest, and that the coordinated arrangement (*suntaxis*) of the cosmos is the cause (*aitia*) of the movement towards the centre.²⁹

An entirely different interpretation is that this fragment, like the other one quoted, is concerned with the definition of place, not with natural place. Such an interpretation has been put forward in different versions by David Sedley and Keimpe Algra.³⁰ Four of the earlier puzzles, (ii) to (v), arose because Aristotle treated place as an entity, namely a surface. Theophrastus in the new fragment suggests that place might instead be treated as a set of relations. This alternative interpretation leaves Theophrastus looking just as clever. The difference will be that he turns out to be less influential. Simplicius does not even list Theophrastus' relational idea as a distinct theory in his initial classification of theories of place. He lists it only as aligned with the view of his teacher Damascius, insofar as those two rather different theories both rely on the idea of arrangement and relation. This suggests that the idea was not particularly well known, which may in turn have been partly because it was presented only as a suggestion and not elaborated.

The conclusion is that Theophrastus' treatment of place was undoubtedly clever, and a major departure from Aristotle. Whether it was also influential depends on the interpretation taken.

The Killing of Animals

I come now to Theophrastus' treatment of animals, most or all of it from his *On Piety*. Porphyry has preserved extensive fragments which attack animal sacrifice.³¹ The work is already fascinating for its anthropological and quasi-historical ideas on the origins of sacrifice and varieties of custom. These have been very well discussed by Dirk Obbink at

²⁹ Plutarch *De Stoic. rep.* 1054E–F; 1055B–C (= *SVF* 2.550). See *MSM* 213–14.

³⁰ Keimpe Algra 1992; David Sedley, unpublished reply to the conference version of my paper in *RUSCH* 3. But whereas Sedley took Theophrastus to be faithful to Aristotle's definition of place and merely raising an extra query about it, Algra takes Theophrastus to be making a counter-suggestion, albeit not properly worked out.

³¹ Porphyry *On Abstinence from Animal Food*.

an earlier conference,³² but I shall concentrate on the philosophical ideas, so far as it makes sense to talk of separating them. They are, as will be seen, intertwined. Aristotle had said:

There is no such thing as friendship or justice in relation to lifeless things. But there isn't even in relation to horse or ox, nor to a slave qua slave, for there is nothing in common (*koinon*), ... although there is such a thing as friendship in relation to the slave qua human.³³

Theophrastus disagrees. To describe our relation to animals, he takes the words *oikeios*, *oikeiotês*. The notion had been offered by Plato in the *Lysis* as one of two alternative grounds for friendship or dearness (*philia*), the other ground being similarity.³⁴ It is used again a few times in Aristotle's account of friendship,³⁵ and understanding.³⁶ But Theophrastus uses it much more insistently. In origin, the terms suggest the idea of belonging to the household (*oikos*), and hence they imply belonging, or being akin. What Theophrastus insists against Aristotle is that animals are akin to us,³⁷ and that the Egyptians and primitive people had appreciated this.³⁸

The main philosophical defenders of animals before Theophrastus, Pythagoras and Empedocles, had believed that animals were literally akin to us, because they are reincarnated humans.³⁹ The words used in the sources for kinship do not include *oikeios*, but range across 'father', 'son', and *sungenês*, *homogenês*, *homophulos*, *homophuês*, *koinônia*. Theophrastus changes this. As an Aristotelian, he did not believe in reincarnation. But he argues that his term for kinship, *oikeios*, is not confined to common ancestry, but can be used more widely, in relation to more distant humans. Further, humans are akin to animals because we are made of the same fluids and tissues, and still more because their souls are no different in appetites, anger, reasonings (*logismoi*) and

³² Dirk Obbink, "The Origin of Greek Sacrifice: Theophrastus on Religion and Cultural History," in *RUSCH* 3 (1988) 272–95.

³³ Arist. *EN* 8.11, 1161b1–3; 5–6.

³⁴ Plato *Lysis* 221E–222D.

³⁵ Arist. *EN* 8.1, 1155a21; 8.12, 1161b22; 9.7, 1167b34–1168a2.

³⁶ Arist. *EN* 6.2, 1139a11.

³⁷ Porph. 3.25 (531 FHS&G).

³⁸ Porph. 2.22; 2.26 (584A 176ff., 261ff. FHS&G).

³⁹ Pythagoras in Diogenes Laertius 8.36; Empedocles Fr. 136, 137 DK; Sextus 9.127–29; Plutarch *De esu* 997E.

above all in the senses. Again, Theophrastus silently corrects the Pythagorean tradition, which had said we are made of the same elements.⁴⁰ He explains that the four elements are shared also by plants, but that animals actually have the same fluids and tissues.

More important, Theophrastus is correcting his teacher Aristotle, and not only on the claim that we have nothing in common with horse and ox. Still more significant is Theophrastus' statement that one of the things in common is reasonings (*logismoi*). The significance of this needs a little explanation, since Theophrastus' divergence from Aristotle is sometimes doubted.⁴¹ It is true that Aristotle often uses the words *phronêsis*, *phronimos* of animals, to describe them as intelligent, and those words in Theophrastus have no new significance. Aristotle even points out that *phronêsis* is different in wild animals and in men.⁴² It is true that in Books 8 and 9 of the *History of Animals* we find Aristotle describing animals as having technical knowledge (*technikos*) and thought (*dianoia*, *nous*). And the first chapter of Book 8 offers the most famous statement of gradualism in Aristotle's biology. We cannot say on which side of the plant/animal border to place sponges, and this gradualism applies to the border between humans and animals too. But the interesting question is how the gradualism is applied. Animals actually have the same temperaments as humans; they can be timid or bold, for example. But when it comes to the three *intellectual* faculties that Aristotle mentions, technical knowledge (*technê*), expertise (*sophia*) and understanding (*sunesis*), animals have only something *different* (*hetera*). There is not identity, but a mere analogy.⁴³ A similar warning is given in the first chapter of Book 9.⁴⁴ In view of these programmatic warnings Aristotle does not need to repeat an explicit qualification every time in these books that he slips into the natural description of an animal as thinking or as technically skilled. But he does introduce an explicit *caveat* when he uses a word for reasoning. It is only as if dol-

⁴⁰ Iamblichus *Life of Pythagoras* 24.108; 30.169.

⁴¹ The splendid challenge laid down by Robert Sharples in the paper pre-circulated to this conference was foreshadowed in a still more detailed and informative paper presented in 1988 to the Cambridge Philological Society. Both papers raise the standard required of any would-be panegyrist of Theophrastus like myself.

⁴² Arist. *EN* 6.7, 1141a22–28.

⁴³ *HA* 8.1, 588a18–31.

⁴⁴ *HA* 9.1, 608a11–12.

phins are reasoning (*hōsper analogisamenoi*) how long they should hold their breath before they dive.⁴⁵

Aristotle cannot afford to allow that animals have reason (*logos* and cognate terms), or the whole of his ethical theory would collapse. His account of the happiest life for a human in the *Nicomachean Ethics* depends on finding an activity unique to humans (*idion*), namely reason (*logos*), or, if humans are to be distinguished also from God, practical reason.⁴⁶ We must therefore take seriously the denials that animals have reason (*logos*),⁴⁷ or reasoning (*logismos*).⁴⁸ If Theophrastus, in a conscious description of animal similarities, here assigns them reasonings, this is not a repetition of Aristotle and cannot be a casual shorthand for something analogous to reasonings after the care that Aristotle had taken. Rather it is a contradiction of Aristotle.

Nothing to the contrary is shown, if Theophrastus elsewhere uses, in a context where it does not matter, the standard description of animals other than man as the irrational animals (*aloga*).⁴⁹ Plutarch even has a treatise entitled, *That the Irrational Animals Use Reason*. Nor can any conclusion be drawn from Theophrastus' treatise, *On Animals Said to be Grudging*. Theophrastus there denies that irrational animals (*aloga*) could be clever enough (*sophia*) to act as the lynx, for example, is said to, concealing its own urine, to prevent humans using it to make rings. Theophrastus need not be interested in whether animals have some degree of reason. All that matters is that irrational as they are commonly described, they are not going to have enough *sophia* to do that.

Reasonings are not the most important ground of animal kinship for Theophrastus, but that is simply because animals are even more like us in respect of sense perception. His idea of *oikeiotês*, or *belonging* in our group, is elaborated by the Stoics into a theory of *oikeiôsis*, a process of *welcoming* others into the group. This is first found connected with the demands of justice in Theophrastus' Stoic contemporary Zeno, but more fully elaborated later by the third Stoic head, Chrysippus. In sharp contrast to Theophrastus, and I would imagine in conscious contrast since the schools operated side by side, the Stoics deny that animals can

⁴⁵ HA 9.48, 631a27.

⁴⁶ Arist. EN 1.7, 1098a3–4.

⁴⁷ Arist. *ibid.*, and De An. 3.3, 428a24; EE 2.8, 1224a27; Pol. 7.13, 1332b5.

⁴⁸ Arist. De An. 3.10, 433a12.

⁴⁹ Porphyry 2.22.2 (584A, 195ff. FHS&G).

be thought of as belonging (*oikeioi*), and hence deny the view of Theophrastus⁵⁰ that our treatment of animals is unjust. Chrysippus is not, as has been thought, inventing new wording when he puts the rival view that there is no such thing as justice in relation to animals. The claim had already been made by Aristotle, and Theophrastus returns to it explicitly (there is no need to emend the text) as something that merely seems (*eoiken*) to be the case because of the existence of dangerous animals. Theophrastus' reply (*ta de*) is that not all animals are dangerous, any more than all humans are criminals.⁵¹ Chrysippus could have picked up the question of whether there is such a thing as justice in relation to animals either from Aristotle, or from Theophrastus, or from both.

The Stoic denial of justice to animals remained firm. But some later Stoics took up Theophrastus' idea here that the notion of *oikeiotês* can be extended beyond the bounds of common ancestry in ever wider circles, at least to the point where it embraces the whole human race.⁵² The following is the longer of Theophrastus' two passages on *oikeiotês*.⁵³ Theophrastus uses in addition an argument of this kind.

We say that those born from the same people, I mean father and mother, are naturally akin (*oikeioi*) to each other. Similarly, therefore, we think that those generated from the same forbears are also akin to each other. Yet we also think that fellow citizens are akin through sharing in land and in interaction with each other. For we no longer judge such people to be akin to each other through having sprung naturally from the same people, unless some of their first forbears were the same natural founders (*archêgoi*) of the race, or were descended from the same people.

⁵⁰ Porph. 2.12; 2.22; 2.24 (584A 96ff., 191ff., 216ff.).

⁵¹ Arist. *EN* 8.11, 1161b1–3; Theophrastus in Porph. 2.22.3 (584A, 203ff. FHS&G). Aristotle and Theophrastus seem to be echoed by Chrysippus (Plutarch *De esu* 2.7, 999B = *SVF* 3.374). J. Bouffartigue puts the different view that Chrysippus must be the original source, so that the reference to justice represents an isolated addition by Porphyry interrupting the extract from Theophrastus (*Porphyre, de l'Abstinence*, Budé edition, vol. 2, 23). Another uneconomical suggestion is Bernays' addition of the word *hen*, followed by Bouffartigue and FHS&G, which diverts the subject to a discussion of the unity of justice. The MSS can remain as they stand, and be taken to mean: dangerous animals *seem* to show that we owe no justice. But, as with humans, others are not dangerous. For *ta de* meaning 'but others', Marlein van Raalte offers me the supporting parallel of Theophr. *Met.* 11a24.

⁵² See Cicero *De Off.* 1.53ff.; *De Fin.* 3.64ff.; Hierocles *ap. Stob.* 4.671.7–673.11 Hense.

⁵³ Porph. 3.25 (531 FHS&G). Some have doubted whether this passage, like those in Book 2, comes from *On Piety*.

In this way, too, I think, we say Greek is akin (*oikeios*) and related to (*sungenês*) to Greek, barbarian to barbarian and all humans to each other through one of two things: either through having the same forebears, or through sharing the same food, habits and race. In this way, too, we class all humans as related both to each other and to all animals. For their bodily origins (*archai*) are by nature the same. By this I do not mean to refer to the primary elements, since plants also are made of these, but for example skin, flesh and the type of fluids that are natural to animals. And much more are they related through their souls being no different in nature, I mean in their appetites (*epithumiai*), anger (*orgai*), and again in their reasonings (*logismoi*) and above all in their senses (*aisthêseis*). But as with their bodies, some animals have souls more finely tuned, others less so, but they still all by nature have the same origins. And this is shown by their passions (*pathê*) being akin (*oikeiotês*).

So far I have given only one of Theophrastus' arguments. Porphyry claims, even before reaching this passage, to have given the main points (*kephalaia*) of Theophrastus' case against animal sacrifice,⁵⁴ and there are many of them. It is wrong to see the arguments as directed only against sacrifice and not also against meat-eating,⁵⁵ given the intimate connexion between these two. For one thing, meat tended to have been sacrificed. Theophrastus himself stresses the converse, that sacrificial victims were always eaten by Greeks, unlike the Syrian Jews, and the eating, in his view, was the real motive for the sacrifice.⁵⁶ He explicitly says that we ought not to touch such food.⁵⁷ This connexion between sacrifice and eating, incidentally, means that to question the killing and eating of animals was to question current religious practice, and was therefore controversial in a way that modern vegetarianism is not. Finally, Theophrastus' concern with justice to animals⁵⁸ provides a general case against killing them.

Theophrastus classifies the possible reasons for sacrifice, of which he recognises three: to show honour, or gratitude, or to get a favour. But one cannot show honour by committing an injustice, nor expect a favour since injustice makes one untrustworthy. And one cannot show grati-

⁵⁴ Porph. 2.32.3 (584A 380ff. FHS&G).

⁵⁵ V. Dierauer, *Tier und Mensch im Denken der Antike* (Amsterdam 1977) 177, with further references at n. 22; Simon Pembroke, "Oikeiosis" in *Problems in Stoicism*, ed. A.A. Long, 114–49, at 136 (London 1971); J. Bernays, *Theophrastos' Schrift über Frömmigkeit* (Berlin 1866) 121.

⁵⁶ Porph. 2.25–29 (584A 240ff.).

⁵⁷ Porph. 2.28.4 (584A 318–19).

⁵⁸ See above, n. 50.

tude by doing harm, any more than by robbing someone in order to make a repayment.⁵⁹

There is a reference here to Theophrastus' idea that animal sacrifice is not holy, as sacrifice is required to be, because the animals are robbed of their lives, which is a harm (*blabê*) and an injustice (*adikeisthai*). It would not be holy even to take and sacrifice someone else's fruit. But soul (*psuchê*) is much more valuable than what grows from the soil. This answers the suggestion that God gave us animals no less than fruit for our use.⁶⁰

The passage is packed with interest. Theophrastus goes beyond Jeremy Bentham's utilitarianism and beyond current UK animal legislation, in recognising loss of life, and not just suffering, as a harm. His teacher Aristotle had already seen that you can be harmed by what happens even if you are not conscious of it and even if you are dead.⁶¹ We can imagine the frustration of a person's life work of which they are ignorant either because they are living in a fool's paradise, or because they have died. It should be still more obvious that a painless and unanticipated early death is a loss, whether to a human or an animal.

Theophrastus goes on to give the fullest answer in the whole of ancient Greek Philosophy to what still remains today one of the most popular antivegetarian arguments. This is the Sorites, or slide argument, that if we spare animals, we will have (absurdly) to spare vegetables. Theophrastus puts it by asking: "Don't we steal from plants too?" We have already seen one of his answers. Plants differ from us because they do not have the same tissues and fluids.⁶² He now gives a battery of further answers.⁶³ Plants are not unwilling (*akontes*) for us to take their fruit; they even drop it if we leave them. Further, when we take their fruit, we do not destroy them. Again, although everything belongs to the gods, plants can be said more truly to be ours, because at least we cultivate them. We may compare honey which we take as a payment for looking after bees. Finally, the less expensive sacrifice is holier, and permits more continuous offerings.

⁵⁹ Porph. 2.24.3 (584A 228–32).

⁶⁰ Porph. 2.12.3–4 (584A 106–16).

⁶¹ Arist. *EN* 1.10, 1110a18–30; Thomas Nagel "Death," *Nous* 4 (1970); repr. in his *Mortal Questions* (Cambridge 1979) 1–10.

⁶² Porph. 3.25.3 (531.12ff. FHS&G).

⁶³ Porph. 2.13 (584A 117ff.).

Theophrastus, like Empedocles before him, seeks to present the killing of animals as something unnatural, although that is not the word used by either of them. Animal sacrifice is attended by guilt.⁶⁴ It was brought on by famine and war, which led first to cannibalism and only then (as in the biblical story of Abraham) to the substitution of animal for human victims.⁶⁵ In other cases, it was introduced through an accident or a fit of temper.⁶⁶

Theophrastus may have been involved in controversy with his contemporary Heraclides of Pontus, who left the Platonist school for the Aristotelian, on not getting the headship after Speusippus. Heraclides (or Clodius who draws on him) concedes that eating raw meat is unnatural, but argues, rather lamely, that eating cooked meat is natural, from its having become universal since the discovery of fire.⁶⁷ Heraclides (or Clodius) also reverses Theophrastus' idea that cannibalism led to killing animals, although he does so in answer to Pythagoras. If we follow Pythagoras' injunction to spare animals, that is what may force us to attack each other, for they will destroy our crops.⁶⁸ Heraclides (Clodius) expands on the danger from animals, by borrowing Aristotle's idea that we wage a just war against animals, because wolves and lions attack us.⁶⁹ Theophrastus answers just such an argument. First, it is legitimate to kill dangerous animals, but then it is legitimate to kill dangerous criminals, even though it is admitted on all hands that they are akin to us (*oikeioi*). Nothing follows about the legitimacy of killing harmless people or animals, and indeed it would be unjust. Primitive people thought of animals too as akin.⁷⁰ The comparison between dangerous animals and criminals goes back to Democritus.⁷¹ Theophrastus next adds that the dangerous animals are in any case inappropriate offerings to the gods.⁷²

I am almost ready to take stock, but to obtain a correct picture of Theophrastus, I must first discount three passages as not representing

⁶⁴ Porph. 2.9 and 2.29 (584A 88ff., 321ff.).

⁶⁵ Porph. 2.9; 2.12; 2.27 (584A 84ff., 96ff., 276ff.).

⁶⁶ Porph. 2.9; 2.29 (584A 87; 327–28).

⁶⁷ Porph. 1.13.

⁶⁸ Porph. 1.23–24.

⁶⁹ Porph. 1.14; Arist. *Pol.* 1.8.

⁷⁰ Porph. 2.22 (584A 191–93).

⁷¹ Democritus Fr. 257–59 DK.

⁷² Porph. 2.23 (584A 207ff.); similarly 3.26.

his views. FHS&G print two passages of Porphyry's *Abstinence* as *possibly* stemming from Theophrastus, in both of which the ideal is espoused of freedom from all passion (*apatheia*), and the removal of passion (*pathôn exairesis*).⁷³ One passage is particularly interesting, because in it Porphyry aligns himself with his Christian opponents in saying that the true sacrifice is not animal sacrifice, but the possession of a pure intellect (*katharos nous*), something which Porphyry conjoins with a soul free of passion (*psuchê apathês*).⁷⁴ The onus will certainly be on anyone who wants to say that these ideas are already in Theophrastus. For Aristotle and his school are traditionally associated with the rival view that what is needed is moderate passion, not the extirpation of the passions. There is abundant evidence that Theophrastus was on this side. He is recorded as approving a moderate (*metriazôn*) kind of love,⁷⁵ as affirming that wise people feel anger,⁷⁶ as endorsing Aristotle's account of the virtues as involving a moderate indulgence in appetite (*epithumia*), anger and fear,⁷⁷ and as holding that here is a kind of passion (*perturbatio*= *pathos*) which is compatible with equability (*constantia*= *empathia*).⁷⁸ This makes me doubt whether the two Porphyry passages cited as advocating freedom from passion can represent Theophrastus. Admittedly, a late source, ascribes to Theophrastus the view that no passion (*passio*) can befall the mind (*animus*) of the wise person.⁷⁹ If this is to be believed, it is easier to suppose that the reference is to non-equable passion.

There is one last Porphyry passage included in the *Sources* as *possibly* Theophrastean, which seems to me unlikely to be so. If we confine ourselves to offering fruits from the soul, we can hope that on concluding our lives we might be deemed worthy of looking on the whole race of the gods in heaven.⁸⁰ This is completely incompatible with Aristotle's view that none of us survives after death, except an entirely

⁷³ Porph. 2.43.3–4 (584B); 2.61 (584D).

⁷⁴ Porph. 2.61.1 (584D 23).

⁷⁵ Athenaeus *Deipnos*. 13.14, 562E (559 FHS&G).

⁷⁶ Seneca *On Anger* 1.12.3; 1.14.1 (446 FHS&G); cf. *Depository of Wisdom Literature*, Theophrastus, Saying 2 (442 FHS&G).

⁷⁷ Stobaeus *Anth.* 2.140.7–142.13, Wachsmuth (449A FHS&G); cf. Simplicius *In Cat.* 253.3–13 (= 438 FHS&G).

⁷⁸ Barlaam of Seminara, *Ethics According to the Stoics* 2.13–14 (= 447 FHS&G).

⁷⁹ *Light of the Soul B*, Ch. 63, *On Wisdom E* (448 FHS&G; cf. 719A–B; 726A).

⁸⁰ Porphyry 2.32.2 (584A 375ff.).

impersonal intellect which is not part of our soul. If Theophrastus had reverted to a view so much more Platonic, we should have expected more record of it in the literature.

I can now explain why I think the *Sources* show Theophrastus to be a significant philosopher. First, as regards originality, he shows himself ready to challenge Aristotle on central and fundamental doctrines. He also shows himself independent as regards contemporary religious practice. There is an enormous contrast with that other great Aristotelian, Alexander of Aphrodisias, who wrote some 500 years later. From Alexander one would learn how to defend Aristotelianism on all the issues that had been raised by the Stoics. That was certainly an elaboration of Aristotelianism, not a mere following. But from Theophrastus there would be no predicting what one might learn. His fresh ideas could lead one in any direction, and not necessarily in the same direction as Aristotle.

As regards quality, we have seen how fully Theophrastus has thought out his case, and with what a wealth of arguments. His answer to the still popular Sorites ("You'll have to avoid vegetables") is unmatched in antiquity in its comprehensiveness. His insistence that robbing animals of life is itself a harm is overlooked by modern utilitarianism and modern legislation, which confine themselves to the harm of distress. He scotches the justification based on the dangerousness of some animals. And he carefully adapts the claim of animal kinship, to free it from the Empedoclean connexion with reincarnation and with plant life.

As regards Theophrastus' influence, I have insisted that influence is manifested not only in copying, although Chrysippus may have been attracted by Theophrastus in his remarks on the natural *suntaxis* of the cosmos, and later Stoics may have responded to his expansion of the concept of kinship. Influence, however, can also be manifested in silence: the Stoics no longer needed after Theophrastus and Strato to attack the prime mover, the two-dimensional conception of place, or the idea of natural place. Again, influence can be shown by reaction and rejection. Were the Stoics really unconscious of *contradicting* Theophrastus, when they used the word he had made so prominent, *oikeiotês*, to *deny* that animals were akin to humans? 600 years later, Porphyry still sees Theophrastus as one of the major sources for any defence of animals.

I hesitate to follow E. Bickel in a further suggestion about Theophrastus' influence. In Porphyry, the case for vegetarianism is closely linked with the case for chastity, although I hope and believe that these are logically independent positions. According to Porphyry, one should be vegetarian partly *because* meat impedes chastity.⁸¹ Bickel sees Theophrastus as another who combined these positions, and makes him the ultimate source for Jerome's collection in the *Contra Jovinianum* of examples of chaste women.⁸² The evidence is slender, but if we were to believe it, we should see Theophrastus' advice to men not to sleep on their backs in a new light.⁸³

⁸¹ Porph. 1.32; 2.45.5.

⁸² E. Bickel, *Diatribae in Senecae philosophi fragmenta* 1 (Leipzig 1915) 217–20.

⁸³ I am very grateful for written comments to Keimpe Algra, Antonio Battagazzore and especially to Robert Sharples.

11

L'originalità della posizione teofrastea nel contesto del pensiero animalistico aristotelico e della fisiognomica zoo-etica tra Peripato, Stoa e loro critici*

Antonio M. Battezzore

E' un dato acquisito che si deve al pensiero di Aristotele il merito di aver portato a definitiva maturazione l'intento di definire gli esseri viventi nelle loro caratteristiche reciproche sia stabilendo il confine, ancora indistinto nel pensiero pitagorico, empedocleo e in quello pitagoreggiante di Timeo nel dialogo omonimo di Platone,¹ tra il regno

* Questo contributo era nato, sulle prime, come un commento alla seconda parte della relazione di Richard Sorabji: *Is Theophrastus a Significant Philosopher?* Su invito dei curatori di questo volume, Marlein van Raalte e J. Max van Ophuijsen, che vivamente ringrazio, quel commento si è poi trasformato in relazione indipendente. Per quanto abbia ampliato e approfondito i contenuti del mio contributo, emancipandolo sostanzialmente da quello di Sorabji, ho ritenuto opportuno lasciare visibile qualche traccia del disegno originario, che ha dato il primo impulso alle mie riflessioni.

¹ Plat. *Tim.* 77A–C. Contro l'uso corrente, che esclude le piante dai termini ζῷα (cfr. Hdt. 2.123) ed ἔμψυχα, la pianta è definita da Timeo ἕτερον ζῷον, in sintonia con la cosmologia empedoclea (Fr. 127 DK; cfr. anche Eraclide Pontico Fr. 89 W.). Per Aristotele i φυτόι sono esclusi dalla classe degli ζῷα (cfr. *De An.* 415a2 con particolare riferimento a 413b8–9, 413a31–414b3). Nella visione di Timeo le piante e gli alberi, a differenza degli animali, sono σύγγενῃ, *coevi* degli uomini, e gli dèi hanno fatto nascere

animale e quello vegetale, sia disegnando appunto il rapporto, che domina ancora oggi i nostri orizzonti concettuali, tra essere umano ed essere animale.

Non è cosa altrettanto riconosciuta, in tutte le sue reali motivazioni e implicazioni, che entro tali orizzonti concettuali, fissati per sempre dalla rigorosa razionalità scientifica di Aristotele, Teofrasto ha tentato di produrre uno strappo innovatore che nasceva da una lucida e forte tensione scientifica e morale tesa a ritrovare l'arcaico senso sacrale dell'unità dei viventi e della loro naturale parentela.

Ma procediamo con ordine. Io sostanzialmente condivido quella linea interpretativa che sottolinea l'autonomia speculativa e ideologica—ma diciamo pure l'originalità—che Teofrasto manifesta nei confronti del suo grande predecessore. Questo atteggiamento di autonomia si può cogliere a vari livelli e in diversi settori del campo di ricerca coperto dai due filosofi, e si coglie anche, e in modo particolarmente marcato, nella speculazione animalistica. Da questo punto di vista, il *De abstinentia* di Porfirio si segnala, come è ben noto, come una fonte di primaria importanza per individuare i moventi che indussero Teofrasto a teorizzare il sentimento di appartenenza che vincola tutti gli esseri viventi² e per la sua volontà di rifiutare, con argomentazioni limpide e improntate a una forte valenza etica, estranea a

tutte queste specie di piante per nutrire la debolezza dell'umanità. Per Platone dunque il regno vegetale è subordinato teleologicamente all'uomo. Sulla natura della pianta cfr. 77B6–C3: il φυτόν non possiede "un proprio movimento" (οἰκεία κίνησις) e la sua ψυχή muove se stessa ma non è in grado di produrre risposte agli stimoli esterni. Può volgersi al sole, ma non può spostarsi, né le è concesso di percepire e riflettere su se stessa. Come osservò A. E. Taylor (*A Commentary on Plato's Timaeus* [Oxford 1928] 542), per Platone le piante hanno αἰσθήσεις contraddistinte dalla mancanza delle δόξαι, ossia non hanno percezione degli oggetti. Traducendo questo concetto nel linguaggio platonico è lecito dire che alle piante manca la δόξα μετ' αἰσθήσεως presente invece nelle parti non razionali dell'anima degli animali (Plat. *Resp.* 442B–D; *Phaedr.* 255E–256A; *Tim.* 69D). Diversa la posizione di Aristotele, che tende a negare la δόξα agli animali preferendo attribuire loro un'innata δύναμις κριτική (cfr. più avanti, n. 39), anche se il filosofo si dimostra fluttuante a proposito delle capacità mentali da riconoscere al mondo animale. In generale, su questo problema e sulle differenze tra Platone ed Aristotele per quanto riguarda il processo della percezione sensibile, mi limito a rinviare a R. Sorabji, "Intentionality and Physiological Processes: Aristotle's Theory of Sense-Perception," in *Essays on Aristotle's De anima*, eds. M. C. Nussbaum e A. O. Rorty (Oxford 1992) 195–225 (cfr. AA. VV., *Aristotele e la conoscenza*, a cura di G. Cambiano e L. Repici [Milano 1993] 37–89).

² Porph. *De abst.* 3.25 = 531 FHS&G.

qualsiasi settarismo religioso di tipo pitagorico e orfico, lo *scelus* insito nel "trauma sacrificale" dello spargimento di sangue animale.

In indagini di questo tipo, riguardanti appunto la valutazione del rapporto fra animale e uomo, la distinzione tra moventi critici è basilare, e non può esimerci da riflessioni che riguardano anche il nostro tempo, in cui l'astinenza carnea è praticata per motivi diversi, ma sinteticamente riducibili a tre: quello igienico, quello religioso e quello filantropico.³ Ciascuno di questi è a suo modo rappresentato nel mondo antico, ma l'aspetto religioso è quello che domina, mentre gli altri due non hanno una reale autonomia; non esistendo un pensiero medico dietetico (non almeno come lo si intende oggi), le implicazioni igieniche dell'alimentazione carnea vengono osservate soprattutto attraverso le loro ripercussioni morali, come causa ed effetto di *τροπή*; quanto alle loro implicazioni in termini di benessere o malessere fisico, esse furono sì oggetto di attenzione—basti pensare al tema della frugalità nel cibo associato al nome di Socrate e alla ben nota posizione di Plutarco nei confronti della sarcofagia—, ma non condussero (per quanto si può capire) ad una teoria, a una dottrina sanitaria ufficiale.

Se i motivi di questo dato di fatto siano da cercare *solo* nella scarsità di conoscenze mediche specifiche, non saprei dire, ma non credo; i condizionamenti della cultura-*standard* erano tutti orientati in una determinata direzione: le mense di Omero, il poeta-maestro, grondano del sangue e del grasso degli animali uccisi, e ciò ebbe evidentemente una ricaduta sul comune sentire; il tipo del *τροφερός*, nei secoli a venire, sarà caratterizzato non solo come uno che mangia troppo, ma anche come uno che va in cerca di rarità, di stranezze (soprattutto di pesci, che il *menu* omerico non conosce).

La novità teofrastea, come si è accennato sopra, è appunto quella di aver affrontato la questione con un'indagine scientifica segnata da forti connotati filantropici; il fatto che di questi connotati noi moderni sentiamo fortemente la mancanza rende infido il terreno, perché la ricerca può essere ideologicamente influenzata dalle nostre attese. Il disagio odierno verso il barbaro rito del sacrificio animale si attenua in quei pochi casi in cui troviamo, nelle nostre fonti, tracce di rituali

³ Naturalmente non mi sfugge la dominante valenza aristotelica del termine e, quindi, la sua improprietà, *ictu oculi*, in tale contesto. Ma uso il termine in senso prettamente plutarcheo e ritengo, comunque, che l'improprietà sia preferibile al conio, sia pure provvisorio, di un improbabile e difficilmente assimilabile "filozoico."

incruenti collegati, in alcune circoscritte culture agrarie e pastorali, al rifiuto dell'alimentazione carnea e, conseguentemente, dello spargimento di sangue animale,⁴ segno questo del rigetto radicale di un sistema di valori legittimato dalla religione pubblica.⁵ Ma anche qui le delusioni sono in agguato. Un esempio minimo, ma più istruttivo degli altri, può essere quello della festa attica delle Diasie, un caso paradigmatico di come una festa con sacrifici animali sia stata trasformata in una festa "pura" per semplice atto di volontà.

Di questa festa ci parla brevemente Tucidide,⁶ una fonte di prim'ordine: ἔστι γὰρ καὶ Ἀθηναίοις Διάσια, ἃ καλεῖται Διὸς ἑορτὴ Μελιχίου μεγίστη, ἔξω τῆς πόλεως, ἐν ᾗ πανδημεὶ θύουσι πολλοὶ οὐχ ἱερεῖα, ἀλλὰ θύματα ἐπιχώρια.

Questo testo, come recentemente è stato ribadito, è perfettamente comprensibile, eppure, in passato, è stato insidiato da più parti; non escludo che una causa di questo fatto sia da cercare nel pregiudizio dovuto alla stessa denominazione della festa, i.e. "la festa di Zeus *benevolo*." Il primo mutamento, accolto da molti, fu quello di πολλοί in πολλά,⁷ con cui si ottiene la presente parafrasi: "Fanno molti sacrifici, nessuno dei quali è uno ἱερεῖον; offrono invece i θύματα tipici del luogo." Con il trådito πολλοί, viceversa, la parafrasi sarebbe stata la seguente: "molti fanno non sacrifici cruenti, ma offerte," il che lascia capire che alle Diasie erano possibili entrambi i tipi di rituale, quello cruento e quello incruento. Con il πολλά di Hermann, i sacrifici incruenti diventavano la totalità. Un passo di Polluce (1.26) afferma che τὰ δὲ ἄρώματα καὶ θυμιάματα καλεῖται· Θουκυδίδης δ' αὐτὰ εἴρηκεν ἄγνὰ θύματα. Questa espressione, ἄγνὰ θύματα, se è tucididea, proviene senz'altro da 1.126.6, e restituisce il testo ἀλλὰ <ἄγνὰ> θύματα, i "sacrifici puri." Questi due restauri davano non solo un buon testo sotto il profilo letterario, ma anche un testo "ideologicamente" invitante.

Purtroppo, o per fortuna, un'epigrafe attica della prima metà del IV sec., siglata SEG XXI.541, e contenente un calendario sacrificale del

⁴ Cfr., su questa tematica, il contributo di C. Grottanelli, "Uccidere, donare, mangiare: problematiche attuali del sacrificio antico," in A.A. V.V., *Sacrificio e società nel mondo antico*, a cura di C. Grottanelli e N. Parise (Bari 1988) 20-21 e *passim*.

⁵ Cfr. M. Detienne, *I Giardini di Adone*, trad. it (Torino 1975 [Paris 1972]) 55.

⁶ t. 1.126.6.

⁷ K. Fr. Hermann, "Ueber die attischen Diasien und die Verehrung des Zeus Melichios zu Athen," *Philologus* 2 (1847) 3.

demo di Erchia, ha cambiato radicalmente le cose. Grazie a questa epigrafe (I, 37ss.), infatti, si apprende che le Diasie prevedevano il sacrificio di una pecora, il che è in netto contrasto con quanto si è fatto dire a Tuciddide in merito ai "sacrifici puri." Il ritrovamento esclude il restauro di Hermann, e forse anche quello suggerito da Polluce, perché, come scrive il Jameson, noi non siamo "entitled to insert, from Pollux, ἀγνά before θύματα, a reading inspired by the ancient (and modern) theory of original, pure, bloodless offerings. As the Erchian practice clearly shows, the use of water or honey at the beginning of the sacrifice does not imply a bloodless ritual at the Diasia."⁸

Storie di questo genere, come si è detto, sono istruttive, oserei dire tipiche. Con Teofrasto, fortunatamente, non corriamo gli stessi rischi, perché le sue convinzioni sulle motivazioni che nella storia culturale dell'umanità segnarono il passaggio dalla *pietas* propria del culto della civiltà agraria all'empio e brutale atto del sacrificio animale ci sono giunte in maniera indiretta ma sostanzialmente affidabile.

Le argomentazioni infatti provengono tutte dalla tradizione che fa capo al medioplatonico Plutarco fra I e II secolo d. C. e, soprattutto, al neoplatonico Porfirio fra III e inizi del IV secolo. Quest'ultimo nel *De abstinentia*, oltre ad attingere numerose argomentazioni presenti nel *De esu carnium* di Plutarco, riporta anche ampie sezioni, sia pure inframezzate da sue personali considerazioni, del Περὶ εὐσεβείας di Teofrasto.

Se, alla luce dell'importante testimonianza porfiriana, è giusto considerare il pensiero animalistico di Teofrasto come eterodosso nei confronti di Aristotele, occorre però prima chiedersi se di tale eterodossia era partecipe anche un altro discepolo di altrettanto grande maestro, ossia Senocrate, il quale, a detta sempre di Porfirio,⁹ commentando la legislazione di Trittolemo, che prevedeva fra i suoi principi quello di non fare del male agli esseri viventi, si sarebbe chiesto se il legislatore avesse così legiferato perché convinto "che fosse orribile uccidere chi è della stessa stirpe (οἰόμενος εἶναι δεινὸν τὸ ὁμογενὲς κτείνειν), oppure perché vedeva che dall'uomo vengono uccisi per il suo nutrimento i più utili fra gli animali." Secondo M.

⁸ M. Jameson, "Notes on the Sacrificial Calendar from Erchia," *BCH* 89 (1965) 166. Prima di lui, l'epigrafe era stata esaustivamente studiata da G. Daux, "La grande démarchie: un nouveau calendrier sacrificiel d'Attique (Erchia)," *BCH* 87 (1963) 624.

⁹ *De abst.* 4.22 = Fr. 98 H. = Fr. 252 I.

Isnardi Parente, che ancora recentemente ha scritto su questo argomento,¹⁰ ci sono buone ragioni per supporre che ὁμογενής fosse “le mot choisi par Xénocrate pour indiquer notre ressemblance avec les animaux, reposant sur la donnée de fait d’une parenté originaire,” per cui la ὁμογένεια fra uomini e animali verrebbe a collocare Senocrate molto vicino alla dottrina teofrastea della οἰκειότης biologica e sociale quale essa si configura in base a Porfirio (*De abst.* 3.25.5ss.), dove appunto uomini e animali sono detti essere συγγενεῖς e si parla di *parentela* fra di loro. Purtroppo la posizione di Senocrate di fronte al mondo animale, a differenza di quella limpida e lineare di Teofrasto, non sembra risultare altrettanto coerente e univoca, soprattutto se considerata alla luce di una testimonianza di Clemente Alessandrino¹¹ da cui risulta che il filosofo, fondandosi su una motivazione etica non priva di aristocratismo e decisamente antropocentrica, avrebbe deprecato nell’opera *Sul nutrimento degli animali* coloro che si alimentano di carne, giacché tale nutrimento “ci rende simili alle anime degli esseri privi di ragione.” Per quanto in tali testimonianze sia assente qualsiasi pur minimo accenno ad una eventuale adesione di Senocrate alla dottrina pitagorica della trasmigrazione delle anime in altri esseri non umani,¹² è verosimile pensare che l’affinità ideologica tra i due filosofi sia solo apparente, e che in realtà la convinzione senocratea sulla stretta parentela tra uomini e bestie abbia poco in comune con la dottrina su cui si fonda Teofrasto per motivare razionalmente, su basi innanzi tutto biologiche sia pure non prive di una

¹⁰ M. Isnardi Parente, “Le ‘Tu ne tuera pas’ de Xénocrate,” in AA. VV., *Histoire et Structure. A la mémoire de Victor Goldschmidt*, eds. J. Brunschwig, C. Imbert et A. Roger (Paris 1985) 165; cfr. anche, della stessa, *Senocrate - Ermodoro, Frammenti* (Napoli 1982) 425.

¹¹ *Strom.* 7.6.24–25 S. = Fr. 21 H. = Fr. 267 I.

¹² La testimonianza più antica su Pitagora, contenente un’allusione probabilmente ironica alla trasmigrazione delle anime in corpi di animali, risale a Senofane (cfr. DL 8.36 = B 7 DK; cfr. anche 9.18 = A 1 DK). Tale credenza, attribuibile con alta verosimiglianza allo stesso Pitagora, sarà destinata ad avere un’influenza importante nei divieti alimentari pitagorici e nella dottrina della “parentela” generale degli esseri viventi. Cfr. in proposito Emped. B 135 DK, dove la norma che stabilisce di non uccidere alcun animale è definita come “la legge estesa a tutti, dovunque attraverso l’ampio dominio dell’aria e attraverso l’infinita luce.” Sulla dottrina pitagorica della metempsicosi in connessione con Empedocle cfr. W. Burkert, *Lore and Science in Ancient Pythagoreanism* (Cambridge, Mass. 1972) 180. Sui divieti alimentari cfr. Detienne 1975, 46–80, 164–73. Per i luoghi relativi alla teoria della parentela degli esseri viventi si veda A. Delatte, *La vie de Pythagore de Diogène Laërce* (Bruxelles 1922 [rist. Hildesheim 1988]) 175.

ricaduta sul piano religioso, il rapporto tra l'uomo e l'animale.

Il principio infatti richiamato dallo scienziato è quello della οἰκειότης o dell'οἰκεῖον, termini che Teofrasto utilizza con altissima frequenza anche nelle sue indagini fisiche e di scienza naturale, caricandoli di un tratto semantico molto marcato e capace di attualizzare nozioni che stanno alla base del suo modo di porsi criticamente di fronte ai molteplici aspetti delle realtà oggetto del suo filosofare. Basti qui dire, con le parole di Pötscher,¹³ che il principio dell'οἰκεῖον "(bezeichnet) einen wichtigen Methodenbegriff der theophrastischen Philosophie. Der οἰκεῖον-Begriff beherrscht die Denkbewegung des Theophrastos in der Erkenntnislehre als οἰκεία θεωρία, in Logik und Ethik, aber auch in den naturwissenschaftlichen Untersuchungen; er betrifft das metaphysische Denken und gewährleistet, dass die gesamte Philosophie dieses Peripatetikers einem wichtigen methodischen Gedanken folgen kann."

In un mio recente saggio sul valore della *communis opinio* nelle opere di Teofrasto,¹⁴ ho avuto modo di sottolineare come il principio dell'οἰκεῖον governi in effetti tutta la sua ἱστορία a livello botanico, secondo un linea metodologica meticolosamente attenta a osservare e raccogliere i dati relativi alle parti delle piante, le quali tutte "ricercano" ciò che è loro "proprio" (οἰκεῖον), come se questo loro "proprio" fosse l'oggetto del loro desiderio ed esse fossero attratte verso di esso da una sorta di necessario moto emozionale, di ἐπιθυμία τοῦ συγγενοῦς appunto,¹⁵ che procede dal possedere esse, in tutte le loro membra (radice, fusto, ramo, foglia), "una certa parentela con l'intera natura" (τινὰ οἰκειότητα πρὸς τὴν ὅλην φύσιν).¹⁶ Questa stessa οἰκειότης, comune a tutte le manifestazioni della natura concepite come legate tra di loro da una sorta di κοινωνία, ha una ricaduta sul piano storico-culturale marcandosi di una forte valenza etica, secondo quanto risulta

¹³ W. Pötscher, *Theophrastos. ΠΕΡΙ ΕΥΣΕΒΕΙΑΣ* (Leiden 1964) 65.

¹⁴ A. M. Battezzatore, "Communis opinio e contro-argomentazione nella fisica e nella scienza naturale di Teofrasto," in AA. VV., *Dimostrazione, argomentazione dialettica e argomentazione retorica nel pensiero antico*, a c. di A. M. Battezzatore (Genova 1992) 232-33, 247, 258 n. 69.

¹⁵ Theophr. CP 2.9. 6. A questo proposito metterebbe conto riflettere, ma non è questa la sede per farlo, su quanto Teofrasto osserva sulla vita delle piante che "forse," pur non avendo ἦθη καὶ πράξεις ὥσπερ τὰ ζῷα (HP 1.1.1), "si amano tra di loro proprio come gli animali" (CP 2.17.5; 3.10.4ss.; 5.5.4).

¹⁶ Theophr. CP 1.16.13.

dagli essenziali passi teofrastei del *De abstinentia* che ad essa fanno preciso riferimento.¹⁷

Davanti a noi si presenta indubbiamente un principio che oggettivamente investe in modo solidale l'intera natura e che risulta privo di qualsiasi sottofondo ideologico a carattere strumentale e utilitaristico, ben diverso dunque da quello cui si richiama Aristotele. Come si evince infatti chiaramente da un passo significativo dell'*Etica Nicomachea*,¹⁸ l'οἰκειότης aristotelica parte dalla struttura concreta dell'οἶκος e dal rapporto intimo dei genitori con i figli per espandersi all'esterno e comprendere via via, con gradazione decrescente, e quindi meno vincolante per quanto riguarda il dovere nei vari tipi di "amicizia," tutti gli esseri umani. I termini relazionati a οἰκειότης sono espressivi di un pensiero sociale che parte dalla originaria comunità ristretta del marito e della moglie per arrivare, attraverso il villaggio (κώμη), alla città (πόλις), escludendo da tale catena gli animali in quanto, non diversamente dagli schiavi, essi sono meri "strumenti" (ὄργανα) della comunità umana, incapaci di agire moralmente perché la sensazione di per sé non è mai principio di alcuna azione morale (ἀρχὴ πράξεως).¹⁹ Con Aristotele assistiamo invero a una ricostruzione finalizzata della "comunità" (κοινωνία) civile: tale ricostruzione prende le mosse dalla famiglia intesa come cellula sociale fondamentale e procede per accrescimenti progressivi: ai componenti i diversi stadi delle relazioni sociali bisogna cercare di distribuire (πειρατέον ἀπονέμειν) ciò che a loro è conforme (οἰκείον), discernendo sempre "in base al grado di parentela (κατ' οἰκειότητα), alla virtù e all'utile."²⁰ Quanto poi leggiamo nel primo libro della *Politica*²¹ non è altro che la codificazione di una realtà sociale e di una fase storica acquisite: tale codificazione viene proiettata da Aristotele a livello di condizione universale e di necessità etico-politica filosoficamente imprescindibile. E qui il cerchio aristotelico della οἰκειότης si chiude in modo definitivo.

Con Teofrasto siamo fuori da questa esclusiva proiezione della συγγενική φιλία e dell'οἰκειότης (sentimenti che hanno come loro

¹⁷ Porph. *De abst.* 3.25.1–4 = 531 FHS&G; cfr. anche 2.22.1 = 584A 191–92 FHS&G.

¹⁸ Arist. *EN* 1165a30–33.

¹⁹ Arist. *EN* 1139a17–20; 1161b1–6.

²⁰ Arist. *EN* 1165a33.

²¹ Arist. *Pol.* 1252b–1253a.

impulso originario l'amore dei genitori verso i figli²² e non già, come nel testo teofrasteo riferito da Porfirio, quello dei figli tra di loro "in quanto nati dagli stessi genitori")²³ nell'assoluta della πόλις, in cui tutto giunge teleologicamente al suo *naturale* compimento. Sotto questo rispetto, dunque, Aristotele chiude un'epoca e ci consegna un paradigma, una *forma*, per usare il suo linguaggio, che si è realizzata compiutamente nella natura e nella storia per sussistere definitivamente.

Ci possiamo chiedere, a questo punto, se il modello aristotelico di οἰκειότης abbia avuto la vitalità teorica di aprire la strada alla sistematica teoria teofrastea della parentela universale fra i viventi eticamente fondata sulla consapevolezza delle comuni radici biologiche. C'è chi ne è convinto²⁴ e argomenta che le successive teorie sociali peripatetiche e addirittura stoiche hanno avuto il principale antecedente, per quanto riguarda rispettivamente l'οἰκειότης e l'egocentrico sentimento stoico dell'οἰκείωσις, nel passo dell'*Etica Nicomachea*²⁵ e nel principio stesso della naturale socievolezza dell'uomo.²⁶ Si tratta di una questione complessa e controversa che qui mi limito a porre sul tappeto: essa d'altra parte è affrontata in questa

²² Arist. *EN* 1161b–1162a; i figli sono definiti, in questo contesto, come degli ἔτεροι αὐτοῖ dei genitori con un'esistenza separata (1161b27–29). La *philia* tra consanguinei, concepita come altro da sé, si allarga via via fino a comprendere, in forme e gradi differenziati, quella tra estranei che vivono insieme. Sulla teoria aristotelica dell'amicizia si vedano W. W. Fortenbaugh, "Aristotle's Analysis of Friendship: Function and Analogy, Resemblance and Focal Meaning," *Phronesis* 20 (1975) 51–62; A. Alberti, "Philia e identità personale in Aristotele," in *Studi sull'etica di Aristotele*, a cura di A. Alberti (Napoli 1990) 263–301; A. W. Price, *Love and Friendship in Plato and Aristoteles* (Oxford 1990).

²³ Come osserva giustamente G. Magnaldi, *L'οἰκείωσις peripatetica in Ario Didimo e nel 'De finibus' di Cicerone* (Firenze 1991) 36.

²⁴ Vedasi, a esempio, C. O. Brink, "Οἰκείωσις and οἰκειότης. Theophrastus and Zeno on Nature in Moral Theory," *Phronesis* 1 (1956) 123–45; cfr. M. Isnardi Parente, "Le radici greche di una filosofia non antropocentrica," *Biblioteca della Libertà* 23 (1988) 82: "Né va dimenticato che [...] Aristotele con la sua analisi delle facoltà psichiche senzienti proprie degli animali aveva aperto la strada alla teoria teofrastea della nostra parentela con essi, della parentela universale fra i viventi." La studiosa tende a non attribuire ad Aristotele la responsabilità storica di un atteggiamento antropocentrico nei confronti del mondo animale sulla base del fatto che la sua teleologia non è provvidenzialistica. Tale responsabilità andrebbe addebitata tutta al provvidenzialismo antropocentrico stoico. Ma su questo problema vedasi più avanti, in riferimento soprattutto alle n. 109 e 124.

²⁵ Arist. *EN* 1161b–1162a.

²⁶ Arist. *Pol.* 1252b–1253a.

stessa raccolta da A. A. Long,²⁷ secondo il quale l'οἰκειότης di Teofrasto non ha niente in comune con la concezione stoica dell'istinto sociale inteso soggettivamente come estensione agli altri del sentimento di conservazione personale proprio degli esseri viventi.²⁸ Sono perfettamente d'accordo con Long e aggiungo che, in linea generale, credo sia necessario evitare, in indagini di questo tipo, quelle generalizzazioni interpretative che hanno la pretesa di tracciare ad ogni costo filiazioni di pensiero e circoscritti rapporti genetici.

Ma una cosa va subito detta: il rimpianto teofrasteo per quel 'tempo incalcolabile' (ἀνάρηθμος χρόνος)²⁹ in cui gli uomini non compivano sacrifici animali ritualizzati ma, pur "con molti travagli e lacrime" (μετὰ πολλῶν πόνων καὶ δακρύων) propri di un'economia agraria e pastorale tecnologicamente arretrata, praticavano la virtù della "temperanza" (σωφροσύνη),³⁰ offrendo agli dei vittime inanimate e serbando il fuoco "immortale" all'interno dei templi,³¹ è esso stesso segno irrefutabile della visione pessimistica che Teofrasto aveva del cammino della storia e dell'immissione della cultura, con il suo delirar di guerre e tumulti, nella natura. Portare il fuoco fuori dai templi significava per Teofrasto allontanarsi da ciò che è ἀρχαῖον, prima di ogni prima, e dare inizio alla progressiva decadenza e degenerazione di un costume di vita semplice e conforme alla volontà divina. Orbene questa visione pessimistica dell'umanità che *ruit in peius*, presente anche nella storia culturale di Dicearco,³² è il segno distintivo di una rottura traumatica rispetto alla concezione antropologica di Aristotele, il quale esalta le magnifiche sorti dell'uomo, essere sociale in grado di

²⁷ 374ss. *infra*. Del quale vedasi anche, per una conoscenza approfondita dello sfondo storico dell'etica stoica fondata sulla nozione di "appropriazione di sé" da intendersi come istintivo desiderio di "autoconservazione," il commento al testo papiraceo di Ierocle, *Elementa moralia* in *Corpus dei Papiri Filosofici Greci e Latini*, Parte 1: Autori noti, vol. 1** (Firenze 1992) 368–451.

²⁸ Sul problema controverso del rapporto tra οἰκειώσις personale e sociale cfr. H. Görgemanns, "Oikeiosis in Arius Didymus," in *On Stoic and Peripatetic Ethics. The Work of Arius Didymus* [RUSCH 1], ed. W. W. Fortenbaugh (New Brunswick, NJ e London 1983) 183 (e *passim*) e le osservazioni critiche di B. Inwood, "Comments on Professor Görgemanns' Paper," *ibid.*, 190–201. Vedasi ora anche la messa a punto del problema, che resta pur sempre aperto, di C. Lévy, *Cicero Academicus. Recherches sur les Académiques et sur la Philosophie Ciceronienne* (Rome 1992) 384–87.

²⁹ Porph. *De abst.* 2.5.1, 584A 1 FHS&G.

³⁰ Cfr. *ibid.* 2.27.5, 584A 294–95.

³¹ *Ibid.* 2.5.2, 584A 15.

³² Porph. *De abst.* 4.1.2 = Fr. 49 W.

vivere compiutamente, nella dimensione naturale della πόλις visibile a sguardo umano, una vita felice grazie anche alle conquiste nelle scienze come la medicina e “in generale in tutte le professioni tecniche e abilità.”³³

Sotto questo rispetto, dunque, l'atteggiamento di Teofrasto, che guarda al passato come ad un'antiorità che è *diacronia assoluta*, idealizzando il ciò che, in un'origine indefinita e utopisticamente prefigurata, “fu sempre,” è radicalmente diverso da quello più concreto e utilitaristico del suo maestro. Quest'ultimo chiude un'epoca, quello è figlio di una temperie culturale che si sta aprendo verso un nuovo concetto di società e di “comunità” civile e naturale insieme.

Già alla luce di queste generali considerazioni vien da pensare che la divergenza di Teofrasto dal maestro sia assai forte: se Aristotele avesse compreso come oggetto di φιλία anche l'animale, rappresentato da Teofrasto come legato da affinità all'uomo in quanto a livello biologico è costituito degli stessi fluidi e tessuti e a livello psichico è accomunato dalle stesse sensazioni di ira, di dolore e di piacere, nonché persino da una certa capacità di formulare “ragionamenti” (λογισμοί),³⁴ una tale ammissione avrebbe messo a soqquadro tutta la sua impostazione del problema etico. Infatti, come ha osservato per esempio Sorabji nella sua relazione, “la descrizione della felicità umana nell'*Etica Nicomachea* si impenna sull'idea di un'attività che sia propria (ἴδιον) unicamente degli uomini: questa attività è l'uso della ragione (λόγος), oppure—per distinguere gli uomini da Dio—della ragione pratica.”³⁵

Possiamo condividere in linea di massima questo giudizio, senza però mai perdere di vista che il testo porfiriano fa riferimento, nel rapporto uomo-animale che sarebbe stato delineato da Teofrasto, soprattutto alla οἰκειότης τῶν παθῶν, ossia alla parentela, all'affinità delle manifesta-

³³ Arist. *Pol.* 1286b36. Per il modo diverso di approccio alla storia culturale da parte di Teofrasto e Dicearco rispetto ad Aristotele, si vedano L. Edelstein, *The Idea of Progress in Classical Antiquity* (Baltimore, MD 1967) 133–35; E. R. Dodds, *The Ancient Concept of Progress* (Oxford 1973) 16–17; P. A. Meijer, “Philosophers, Intellectuals and Religion in Hellas,” in *Faith, Hope and Worship: Aspects of Religious Mentality in the Ancient World*, ed. H. S. Versnel (Leiden 1980) 252 e, ivi, n. 111; D. Obbink, “The Origin of Greek Sacrifice: Theophrastus on Religion and Cultural History,” in *Theophrastean Studies: On Natural Science, Physics and Metaphysics, Ethics, Religion and Rhetoric* [RUSCH 3], eds. W. W. Fortenbaugh and R. W. Sharples (New Brunswick, NJ e Oxford 1988) 278–79.

³⁴ Porph. *De abst.* 3.25.3 = 531.17–21 FHS&G.

³⁵ Sorabji 214, *supra*.

zioni psichiche e delle esperienze sensitive. Io nutro forti dubbi, anche alla luce di quanto dirò in seguito, che Teofrasto accordasse agli animali le *facoltà raziocinanti*, i λογισμοί, nel senso in cui questo termine, nell'accezione cogente in cui non rientrano né agiscono *direttamente* gli impulsi naturali,³⁶ può essere inteso *al singolare*³⁷ e solo in riferimento all'agire umano. E' per altro anche ragionevole pensare che i contesti in cui Porfirio inserisce fedelmente il pensiero di Teofrasto, se non sempre le parole stesse, determinino, anche non volutamente, un'accentuazione della distanza del discepolo rispetto al maestro e tendano ad accomunarli a quella tradizione di pensiero accademica che

³⁶ L'uso teofrasteo del termine, al *singolare* e riferito al comportamento proprio degli uomini "saggi" (φρόνιμοι) che non devono agire in preda all'ira (μετ' ὀργῆς), si incontra in Stob. *Anth.* 3.19.12 (= 526 FHS&G) dove si afferma che solo con il potere del λογισμός si tiene sotto controllo la "collera": ἀλόγιστον γὰρ θυμός, καὶ μετὰ προνοίας οὐδὲν ἂν ποτε ποιήσειεν (cfr. anche 441 FHS&G). Sul rapporto tra Aristotele e Teofrasto, per quanto riguarda la discussione dei πάθη sulla base di questa testimonianza, rinvio a W. W. Fortenbaugh, "Theophrastus on Emotion," in *Theophrastus of Eresus: On his Life and Work* [RUSCH 2], eds. W. W. Fortenbaugh, P. M. Huby and A. A. Long (New Brunswick, NJ e Oxford 1985) 209–29. Per quanto riguarda la nostra specifica ricerca, basti ora rilevare che la contiguità semantica tra λογισμός e φρόνησις risulta del tutto evidente alla luce di questo contesto. Nella direzione qui prospettata, un uso interessante del termine, inteso come superamento del momento originario e immediato della φύσις, si trova, per esempio, in Epicuro a proposito del problema dell'evoluzione del linguaggio a partire dai suoi iniziali e concreti rapporti con la realtà delle cose e con i πάθη: "Bisogna anche credere che la natura molti e diversi insegnamenti trasse dalle cose stesse e da queste fu costretta; successivamente il raziocinio (λογισμός) sviluppa con maggiore impegno ciò che gli è affidato dalla natura ed aggiunge invenzioni in alcuni campi più velocemente, in altri più lentamente ed in alcuni periodi e tempi "compie progressi maggiori," in altri progressi più lenti" (*Ep. Hdt.* 75). Da questo passo molto tormentato, e che ha subito numerose correzioni da parte dei critici, emerge comunque chiaramente che grazie allo sviluppo del λογισμός la φύσις si trasforma in τέχνη. Vedasi ora, in proposito, G. Giannantoni, "Epicurei e Stoici sul linguaggio," in *Storia Poesia e Pensiero nel Mondo Antico*, Studi in onore di M. Gigante (Napoli 1994) 251–54. Si tenga anche presente il commento al passo epicureo di G. Arrighetti, *Epicuro. Opere* (Torino 1973) 520–21.

³⁷ In questo senso molto più impegnativo sembra invece intendere il termine Plutarco (*De soll. an.* 960A): μετέχειν ... πάντα τὰ ζῶα διανοίας καὶ λογισμοῦ. A riprova, per altro, dell'impiego fluttuante del termine, da parte dello stesso Plutarco, mette conto rilevare che in un passo del *Grillo* (988E) viene posto a confronto il coraggio innato degli animali con quello proprio del comportamento umano, che viene definito una "saggia vigliaccheria" (δειλία φρόνιμος) perché "annacquato" dall'uso del λογισμός, ossia del "calcolo," che in questo caso "è visto come motivo di inferiorità dell'uomo nell'esercizio del coraggio" (G. Santese, *Animali e razionalità in Plutarco*, in AA. VV., *Filosofi e animali nel mondo antico*, a cura di S. Castignone e G. Lanata [Pisa 1994] 158).

specialmente nel II a. C. sviluppò tutta una serie di argomentate obiezioni contro la dottrina stoica che negava alle bestie il possesso della ragione e, quindi, escludeva l'esistenza di un rapporto di giustizia fra quelle e l'uomo. Echi e riecheggiamenti di queste dispute, risalenti a Carneade e alla Nuova Accademia, sono ben testimoniati in Plutarco, in particolare nel *Gryllus*, nel *De esu carnium*, in alcune *Quaestiones convivales* e soprattutto nel *De sollertia animalium*, dialogo nel quale il pensiero animalistico non è volutamente collegato col pitagorismo, perché si intende combattere "sul piano scientifico la radicale posizione degli stoici che negavano la ragione degli animali."³⁸

Condurre pertanto la comparazione tra Aristotele e Teofrasto nel senso che il primo avrebbe negato a certi animali il possesso della facoltà del λογισμός ammessa invece dal secondo, non credo sia molto produttivo e non credo neppure che l'impostazione teofrastea, su questo specifico piano, sia da intendersi come una replica al *cave* espresso dal maestro. Aggiungo inoltre che, se da una parte è corretto affermare che i termini φρόνησις e φρόνιμον, impiegati da Aristotele³⁹ per caratterizzare la particolare natura della "saggezza" pratica degli animali capaci di *previdenza* per quanto riguarda i comportamenti e le reazioni di fronte a situazioni specifiche e quotidiane che riguardano direttamente la loro vita,⁴⁰ non presentano in Teofrasto una diversa

³⁸ A. Barigazzi, "Implicanze morali nella polemica plutarchea sulla psicologia degli animali," in AA. VV., *Plutarco e le scienze*, a cura di I. Gallo (Genova 1992) 304 e *passim*.

³⁹ Può essere interessante ricordare che Aristotele nel *De anima* (427a21) asserisce che gli ἀρχαῖοι in generale non distinguevano il φρονεῖν dall'αἰσθάνεσθαι, intendendo così la percezione come una capacità d'intendere propria del pensiero pratico. Cfr. anche 427b6ss. Va altresì ribadito (cfr. *supra* n. 1) che per Aristotele tutti gli animali posseggono δύνανται σύμφυτον κριτικήν, ἣν καλοῦσιν αἴσθησιν (*Anal. Post.* 99b35).

⁴⁰ Cfr. *EN* 6.7, 1141a20–b2; cfr. anche *GA* 753a7ss.; *PA* 687a7. Per la comprensione dell'intera argomentazione aristotelica in *EN* 6.7 sul modo di intendere la differenza fondamentale tra ciò che è "sapiente" (τὸ σοφόν) e ciò che è "saggio" (τὸ φρόνιμον), anche in connessione con l'intelligenza pratica degli animali, si veda W. Leszl, "Alcune specificità del sapere pratico in Aristotele," in AA. VV., *Studi sull'etica di Aristotele*, a cura di A. Alberti (Napoli 1990) 80–83. Definire "saggi" gli animali che sanno provvedere alla loro vita comporta, secondo M. Detienne e J. P. Vernant (*Le astuzie dell'intelligenza nell'antica Grecia*, trad. it. [Bari 1978] 246–47), il rimettere in causa da parte di Aristotele la separazione radicale tra gli uomini e le bestie, in quanto i modelli fondamentali della μῆτις, intelligenza obliqua, ambigua e polimorfa, "si costituiscono in un campo dove l'intelligenza degli uomini interferisce costantemente con quella degli animali terrestri e acquatici, affrontati nell'attività della caccia e della pesca."

pregnanza semantica, dall'altra non è altrettanto corretto attribuire pari pari al pensiero di Aristotele quanto si legge in due passi del libro nono della *Historia animalium* (il libro nono, infatti, è generalmente considerato una compilazione sicuramente di mano non aristotelica, contenente anche inserti teofrastei).⁴¹ Soprattutto, in questa ottica, è degno di considerazione il passo di *HA* 608a11–13, che si muove al di fuori della razionalità scientifica aristotelica e che sembra mettere in crisi quella linea di demarcazione sulla quale Aristotele aveva costruito la figura dell'uomo: "Alcuni animali possiedono anche una certa capacità di insegnare e di apprendere, o da se stessi o dagli uomini ... non solo nel senso di percepire le differenze fra i suoni ma anche quelle fra i significati." Anche il contenuto del passo molto importante del cap. I del libro ottavo⁴² merita particolare attenzione: si parla infatti dei diversi "comportamenti e modi di vita" (πράξεις καὶ ἥθη) degli animali a seconda dell'indole e del tipo di alimentazione e, attraverso uno schizzo di psicologia comparata di grande efficacia e suggestione, si sostiene che in molti di essi è presente un qualcosa somigliante alla capacità di comprendere a livello intellettuale (τῆς περὶ τὴν διάνοιαν συνέσεως ἔννευσιν ἐν πολλοῖς αὐτῶν ὁμοιότητες).⁴³

Secondo il giudizio, che io condivido, di numerosi studiosi, tra i quali ci limitiamo a citare i più recenti, Dierauer⁴⁴ e Fortenbaugh,⁴⁵ in questo importante capitolo c'è la mano di Teofrasto, il quale con la sua teoria della οἰκειότης τῶν παθῶν aveva edificato un solido ponte tra la psiche umana a quella di certi altri animali. Soprattutto risulta interessante, per l'innovatore concetto soggiacente, quanto si legge subito dopo, ossia che "alcuni animali differiscono rispetto all'uomo per una differenza secondo il più e il meno, come pure l'uomo rispetto a molti animali [...] mentre altri differiscono secondo l'analogia: come infatti nell'uomo è presente la tecnica, il sapere (σοφία) e l'intelligenza (σύνεσις), così in alcuni animali è presente una diversa analoga disposizione naturale

⁴¹ La questione cesserebbe di essere tale se fosse vero ciò che cerca di dimostrare E. Browning Cole nell'interessante saggio "Theophrastus and Aristotle on Animal Intelligence," in *RUSCH* 5 (1992) 44–62 (Si vedano, in particolare, le "Conclusioni," 61–62). Ma, in proposito, si vedano le nostre conclusioni e la n. 116.

⁴² Arist. *HA* 588a18–31.

⁴³ *HA* 588a23–24.

⁴⁴ U. Dierauer, *Tier und Mensch im Denken der Antike. Studien zur Tierpsychologie, Anthropologie und Ethik* (Amsterdam 1977) 166–67.

⁴⁵ W. W. Fortenbaugh, *Quellen zur Ethik Theophrasts* (Amsterdam 1984) 284–85.

(οὕτως ἐνίοις τῶν ζῴων ἐστὶ τις ἑτέρα τοιαύτη φυσικὴ δύναμις).⁴⁶ La φυσικὴ δύναμις di certi animali, quelli almeno più elevati nella scala naturale, ha come corrispettivo (τοιαύτη) funzionale la φύσις razionale.⁴⁷ Ma tale δύναμις è situata fuori del γένος umano e non ammette pertanto l'esistenza di uno spazio aperto all'individuazione di una "differenza specifica" (διαφορά) a livello di comparazione qualitativa con la specie umana, come ha lucidamente dimostrato Aristotele, che definisce *alterità* (ἐτερότης) tutto ciò che trascende le differenti proprietà che afferiscono al γένος.⁴⁸

La presenza, sullo sfondo, di questa fondamentale distinzione classificatoria aristotelica può essere individuata, io credo, anche nel frammento teofrasteo del trattato "Sugli animali che sono detti essere invidiosi" conservato da Fozio.⁴⁹ Ci limitiamo a riportare il punto centrale del contesto in cui Teofrasto porta esempi di particolari comportamenti degli animali⁵⁰ che, secondo il sapere popolare, sarebbero motivati dall'invidia di recare beneficio agli uomini:

ἀλλ' ὅτι μὲν οὐ διὰ φθόνον ταῦτα ποιεῖ τὰ ζῷα, ἀλλ' οἱ ἄνθρωποι ἐκ τῆς ἰδίας ὑπολήψεως ταύτην αὐτοῖς περιῆσαν τὴν αἰτίαν, παντὶ δῆλον. πόθεν

⁴⁶ HA 588a25–31.

⁴⁷ Per un concetto che si avvicina al presente contesto cfr. *Met.* 1046b1–2: (ἐπεὶ ..., δῆλον ὅτι) τῶν δυνάμεων αἱ μὲν ἔσονται ἄλογοι αἱ δὲ μετὰ λόγου. Ringrazio M. van Raalte per avermelo segnalato.

⁴⁸ *Met.* 1057b37 e 1058a7; cfr. 1054b23: διαφορά καὶ ἐτερότης ἄλλο. Cfr. infine 1055a26: δέδεικται γὰρ ὅτι πρὸς τὰ ἔξω τοῦ γένους οὐκ ἔστι διαφορά. Sui modi di intendere l'espressione τὰ ἔξω τοῦ γένους vedasi P. Pellegrin, *La classification des animaux chez Aristote. Statut de la biologie et unité de l'Aristotélisme* (Paris 1982) 81–84.

⁴⁹ Phot. *Biblioth.* 278, 528a40–b27 (t. 8, 166–67 H. = L 9 F. = 362A 11–14; 19–20 FHS&G).

⁵⁰ Si menziona, tra l'altro, il comportamento curioso della lince, che nasconderebbe la propria orina per impedire agli uomini di utilizzarla per i sigilli e per altri usi. Il riferimento è al *lincurio* (anche *lincuria*), una pietra preziosa alla quale si attribuivano speciali proprietà terapeutiche e che si riteneva fosse prodotta dall'orina della lince. Grazie sempre a Teofrasto (*Lapid.* 5.28) apprendiamo che questa sostanza minerale, una sorta di ambra, prodotta dall'orina addensata e indurita della lince, veniva utilizzata anche per cesellare i sigilli. Cfr. N. Tommaseo e B. Bellini, *Dizionario della lingua italiana*, IV (Torino 1916) 1856 s.v. '*Lincurio*': "pietra o sostanza minerale, uno dei pochissimi corpi ai quali gli antichi riconobbero la virtù elettrica. Si ritiene possa essere la Tormalina dei moderni, che si elettrizza per variazioni di temperatura." In tali atteggiamenti 'portentosi' di certi animali si coglie la lontana radice di quella fortunata letteratura di *mirabilia* animalistici che, sottoponendo le azioni e i caratteri degli animali ad interpretazioni simboliche (e addirittura allegoriche), avrebbero portato, col tempo, alla creazione di opere come il cosiddetto *Fisiologo*.

γὰρ τοῖς ἀλόγοις ἢ τοσαύτη σοφία, ἣν καὶ οἱ λογικοὶ μετὰ συχνῆς μελέτης
μανθάνουσιν; ... πολλὰ δὲ καὶ ἄλλα πράττεται τοῖς ἀλόγοις, ὧν οὐκ ἔχομεν
λόγον ἀποδοῦναι, κτλ.

Io credo che un'attenta lettura *immanente* di questo passo apra notevoli spiragli per la comprensione dell'originalità del pensiero teofrasteo sulla psicologia animale. A Teofrasto interessa qui evidenziare che l'*opinione* degli uomini riposa sulla fallacia del sillogismo ipotetico "per analogia,"⁵¹ nel quale la conclusione è formalmente simile alla premessa. Questo in sostanza il senso del passo: molti comportamenti animali non sono razionalmente spiegabili (οὐκ ἔχομεν λόγον ἀποδοῦναι), ma, non di meno, gli uomini si danno una facile risposta proiettando sugli animali i propri sentimenti; quindi, essendo la natura umana invidiosa, sulla base di un'arbitraria supposizione,⁵² essi attribuiscono agli animali stessi comportamenti invidiosi *verso gli uomini* per poi concludere analogicamente che questa è la spiegazione di tali loro comportamenti. Teofrasto dunque, *dando per concettualmente scontata la distinzione fissata una volta per tutte da Aristotele tra uomo come essere λογικός e animale come essere ἄλογον*, dice esplicitamente, ma anche implicitamente, qualcosa di molto rilevante per quanto concerne la οἰκειότης che lega l'uomo all'animale: essa deve partire dalla consapevolezza dell'arbitrarietà di certe analogie che giungano a istituire correlazioni tra τέχνη, σοφία e μελέτη dei λογικοὶ e φυσικόν τι πάθος degli ἄλογα, dimostrando così di non tenere conto della radicale *incomparabilità*—dico *incomparabilità* e non già *differenza*, la quale presupporrebbe un terreno comune di confronto—che sussiste tra la psicologia e le mediate esperienze sensitive umane, capaci di raggiungere, grazie all'esperienza e all'uso continuato della μελέτη, livelli differenziati di *sapere* e quelle immediate e naturali dell'animale.⁵³ Il che, ovviamente, non esclude

⁵¹ Cfr. Alex. Aphr. *In Anal. Pr.* 1.29, 45b19 (CAG 2.1, 326.8–12 Wallies = 63e W. = 113A FHS&G).

⁵² Sull'uso di ὑπόληψις cfr. Porph. 2.59–61.6 (Fr. 8 Pötscher) a proposito dell'*opinione* degli uomini di poter corrompere la divinità e di neutralizzare l'ingiustizia con dei sacrifici. Cfr. anche Theophr. *Sens.* 4 e Arist. *Rhet.* 1417b10 (περὶ ὧν ... μὴθὲν ἴσμεν ὅμως λαμβάνομεν ὑπόληψιν τινα); *EN* 1139b17 (ὑπόληψι γὰρ καὶ δόξη ἐνδέχεται διαψεύδεσθαι). Come osserva Pötscher 1964, 42, alla parola è legata "l'incertezza e l'errore dell'opinione."

⁵³ Su questa problematica vedansi anche Dierauer 1977, 168 e Fortenbaugh 1984, 160–61.

affatto che anche gli animali provino *tra di loro e a modo loro* il sentimento dell'invidia.⁵⁴ Così va intesa, credo, la teofrastea οἰκειότης τῶν παθῶν, la quale, proprio perché non trascende il livello sensitivo dell'αἰσθάνεσθαι, non può dare luogo a indebite analogie che coinvolgano la facoltà del λόγος precludendo, in questo modo, la capacità di riconoscere l'autonomia e la peculiarità del "diverso."

Teofrasto, dunque, definendo appunto l'animale come ἄλογον,⁵⁵ non si pone fuori dalla linea maestra della razionalità aristotelica, ma sa trarre da questa fondamentale premessa le conseguenze per una diversa e più corretta valutazione dell'etologia animale: collocando le δυνάμεις zoologiche completamente fuori dal dominio umano della cultura e del λόγος, egli si attiene scrupolosamente al criterio fondamentale in base al quale Aristotele aveva separato il regno animale da quello dell'uomo, il cui linguaggio, avente come segno distintivo la parola, è dotato di una struttura astratta che è il risultato del suo carattere simbolico, a differenza della διάλεκτος immediata e spontanea propria dell'animale.⁵⁶

⁵⁴ Cfr. Dierauer 1977, 165 e Fortenbaugh 1984, 16: entrambi, a proposito dell'invidia tra le aquile giovani e vecchie, citano HA 9, 619b28–29, un testo che può derivare da Teofrasto.

⁵⁵ Secondo Pötscher 1964, 50–68 l'impiego nel *De abstinentia* dell'espressione ἄλογα ζῷα, insieme con quello del termine οἰκεῖον, è una buona spia per individuare e circoscrivere l'inserimento del pensiero teofrasteo e distinguerlo da quello di Porfirio, il quale, soprattutto nel terzo libro, sottolinea il possesso del *logos* da parte degli animali (cfr. *De abst.* 3.1.4; 2; 6; 8). Vedasi ora G. Camassa, "Frammenti del bestiario pitagorico nella riflessione di Porfirio," in AA. VV. *Filosofi e animali* 1994, (*supra* n. 37) 97, il quale, per altro, non si sottrae alla tendenza invalsa, ma a mio giudizio arbitraria, di spiegare l'impiego teofrasteo dell'espressione aristotelica ἄλογα ζῷα come segno dell'accettazione integrale di "un ben definito sistema di idee e di valori."

⁵⁶ Come ha sottolineato recentemente il filosofo del linguaggio Tullio De Mauro (*Un'etica dal linguaggio*, in *Capire le parole* [Bari 1994] 145), "dopo gli studi pionieristici di John Lilly (sui delfini) e di Karl von Frisch (sulle api), negli ultimi trent'anni una nuova scienza, la zoosemiotica, ci ha aperto sconfinati orizzonti sui modi e le tecniche di comunicazione nel mondo degli animali diversi dagli umani, orizzonti che oggi si vanno ampliando allo studio della comunicazione intracellulare e genetica, come sta mostrando un biologo italiano, Ernesto Di Mauro. Così, una lunga tradizione che negava agli altri animali la capacità di comunicare è finalmente entrata in crisi. Ma a capo di tale tradizione, spesso violentemente dogmatica, non ci fu Aristotele. Tra i grandi meriti del "maestro di color che sanno" c'è stato anche questo: avere compreso che anche le voci degli animali sono portatrici di senso, vettori di comunicazione. A tale sua tesi anticipatrice Aristotele si richiama anche nella *Politica* [1253a7–18]. E se ne serve per cogliere e specificare, su questo sfondo semiotico generale, ciò che caratterizza la parola umana rispetto ai linguaggi di altri animali." Sull'importanza, per gli studi di psicologia animale, del processo di comunicazione

Quanto poi all'attribuzione, prima accennata, dei λογισμοί agli animali, si tratta indubbiamente di un termine "intrigante," ma che non deve essere sovraccaricato di significati. L'espressione, che Porfirio⁵⁷ potrebbe anche aver tratto dal *Περὶ ζῴων φρονήσεως καὶ ἡθους* di Teofrasto,⁵⁸ suona come segue: λέγω δὴ ταῖς ἐπιθυμίαις καὶ ταῖς ὀργαῖς, ἔτι δὲ τοῖς λογισμοῖς, καὶ μάλιστα πάντων ταῖς αἰσθήσεσιν. Il Pötscher (60), sulla scorta della linea interpretativa indicata da E. Zeller⁵⁹ e ulteriormente sviluppata da O. Regenbogen,⁶⁰ si domanda quale sia il valore di questi λογισμοί in stretta connessione con la psicologia animale. Il disagio di certi studiosi nasce dal fatto che, invece di usare un termine afferente al φρονεῖν, Teofrasto ha usato un termine che sembra riferirsi piuttosto all'attività intellettuale superiore. Ma Fortenbaugh *et alii*⁶¹ sono nel giusto allorché traducono con "calculations": la parola viene così chiaramente depotenziata, e può essere vista in netto contrasto con il λόγος. Quest'ultimo è appannaggio solo dell'uomo, mentre le forme di "ragionamento," ossia gli stratagemmi, gli accorgimenti, la frode, la destrezza, l'istinto affinato dall'esperienza, queste disposizioni tutte, e altre ancora, esistono innate anche nella psicologia degli animali: tendere un agguato alla preda, nascondersi o mimetizzarsi per sfuggire al predatore, procacciarsi il cibo, adottare specifiche tecniche rituali di corteggiamento, edificare ingegnosamente un nido nel modo più funzionale, associare altri esseri a situazioni utili o dannose, sono tutte appropriate strategie che trascendono la sfera puramente meccanica dell'istinto e che l'evidenza stessa ci costringe a supporre operanti anche in esseri che nella loro vita sensitiva sono sì ἄλογα, "irragionevoli," ma dotati di quella forma di sensazione previdente che Aristotele, come abbiamo già sottolineato, definì

fra le api fatto conoscere dalle ricerche di Karl von Frisch e, più in generale, sulla nozione di "linguaggio" applicata abusivamente al mondo animale cfr. E. Benveniste, "Comunicazione animale e linguaggio umano," in *Problemi di linguistica generale*, trad. it., Milano 1971 [Paris 1966] 70-77.

⁵⁷ *De abst.* 3.25 = Fr. 20 Pötscher = 531.18 FHS&G.

⁵⁸ *Contra* Dierauer 1977, 171-72 e, ivi, n. 7: "Die in diesem Satz vorkommende Wortverbindung ἐπιθυμίαι-ὀργαῖς scheint typisch porphyrisch zu sein; vgl. *abst.* 1, 44 (...); 3, 26 (...)." Comunque lo studioso non sembra dubitare che il 'Gesamtsinn' della sezione introdotta da Porfirio sia teofrasteo. Si veda più in generale anche lo *status quaestionis* in Fortenbaugh 1984, 284-85.

⁵⁹ E. Zeller, *Die Philosophie der Griechen*, Bd. II.2 (Leipzig 1921) 851.

⁶⁰ O. Regenbogen, *RE Suppl.* VII (1940) 1432.

⁶¹ Cfr. 531.18 FHS&G.

felicemente come “innata facoltà atta a discernere” (δύναμιν σύμφυτον κριτικήν).

Nessuna linea di demarcazione tra l'uomo e l'animale si può dunque tracciare sulla base di un uso linguistico del tutto congruente con un contesto dal quale *solo* trae il suo specifico significato. Non diversamente da Aristotele, che era e/o si sentiva più avanti della lingua in cui si esprimeva, anche Teofrasto poteva rimediare alla *sermonis egestas* utilizzando il concetto di “omonimia.” Virtualmente, il termine λογισμός, soprattutto impiegato al plurale, rientra in questa categoria di usi speciali. D'altra parte anche le distinzioni aristoteliche tra uomo e animale non partono sempre dagli stessi presupposti; Aristotele, talvolta, mira a differenziare l'uomo dagli animali *proprio partendo dall'uomo in quanto animale*. E' ciò che egli vuol fare, credo, in un capitolo della *Historia animalium* che è anche, presumibilmente, uno dei passi a cui i fisiognomici dei tempi successivi avranno guardato con maggior interesse: “alcuni animali sono miti, remissivi, tutt'altro che aggressivi, come il bue; altri sono irosi, aggressivi e stupidi, come il maiale selvatico; altri sono intelligenti (φρόνιμα) e paurosi, come il cervo;⁶² altri sono sordidi e infidi, come i serpenti, altri leali, coraggiosi e nobili (εὐγενῆ), come il leone; altri sono virili (γενναῖα), selvatici e ingannatori, come il lupo (per εὐγενής io intendo colui che viene da un ἀγαθὸν γένος, per γενναῖος colui che non muta la propria natura). E poi ce ne sono altri furbi e traditori, come la volpe; altri animosi, affezionati e adulatori, come il cane; altri miti e addomesticabili, come l'elefante; altri diffidenti e sempre sul chi vive, come l'oca; altri invidiosi e vanitosi, come il pavone; solo l'uomo, tra gli animali, è deliberativo (βουλευτικόν); molti animali partecipano della facoltà della memoria (μνήμης) e dell'apprendere, ma nessun altro animale, tranne l'uomo, ha la capacità di ricordare (ἀναμνήσκεσθαι).”⁶³

Come si vede, Aristotele può risparmiarsi, nel caso particolare di questa σύγκρισις, di menzionare il λόγος. Ciò non significa, naturalmente, che questa essenziale distinzione non valga più; significa solo che egli sta parlando *ad un altro livello*. Gli animali in quanto animali e l'uomo in quanto uomo, osservati da un punto di vista

⁶² Seguo il Dittmeyer nell'espunzione di δασύπους, che i codd. tramandano subito dopo ἔλαφος.

⁶³ Arist. HA 488b13ss.

meramente teorico, cioè in rapporto all'elemento distintivo che separa le due specie, si delimitano gli uni come ἄλογα e l'altro come λογικός, ma, quando gli uni e gli altri vengono calati nelle molteplici relazioni e funzioni della vita e della sopravvivenza, delle reazioni e dei comportamenti, le distinzioni si fanno forzatamente più sfumate e fluttuanti anche a livello descrittivo.

Alcune di queste contraddizioni apparenti sono state rilevate scrupolosamente dalla Browning Cole sia in Aristotele sia in Teofrasto. E proprio a proposito dell' "invidia," di cui l'uomo sarebbe vittima da parte di certi animali, e al fatto che Teofrasto dichiara che esseri ἄλογα non possono assumere comportamenti tipici degli esseri λογικοί, la studiosa si chiede: "Is this a different Theophrastus than the one who was willing to discuss the 'amores flagrantissimi' of dolphins?" Naturalmente no: la "ragionevolezza" e "l'irragionevolezza" sono d'altra parte concetti provvisori, che si chiariscono solo alla luce di una relazione e, come si è già sottolineato, non vi può essere dubbio che il significato di un termine è il suo stesso uso. Ciò basta, credo, per spiegare la ricorrenza del termine ἄλογα, che nel contesto sopra citato conferisce estrema coerenza al pensiero animalistico di Teofrasto. "It is possible"—dice ancora la studiosa—"that the term *alogos* could be read as indicating the absence of the capacity for significant speech. As such, it would be functioning as a neutral designation of non-human animals, entailing nothing substantive about their intellectual and psychological limitations." E' una spiegazione ingegnosa, ma non necessaria, sia alla luce di quanto si è detto sia alla luce del fatto che anche noi diciamo correntemente che "un animale è intelligente," oppure che "il cavallo è più intelligente dell'asino," in senso diverso rispetto a frasi come "un libro intelligente," "un'ipotesi intelligente." Se mai, convengo più con l'altra spiegazione avanzata dalla studiosa, e che mi sembra mostri anch'essa di preferire: "But perhaps [il termine ἄλογος] seems also to carry an unmistakable flavor of derogation or devaluation."⁶⁴

Il passo aristotelico citato di sopra è importante anche per un altro rispetto. In esso si segnala la distinzione tra μνήμη e ἀναμνήσκεισθαι, che è però una distinzione che Aristotele in questo specifico contesto affida interamente al lettore, e che affiora in tutta chiarezza solo perché i due termini sono contigui. La μνήμη è ciò che consente all'animale di ricordarsi e.g. quale cibo è commestibile e quale no,

⁶⁴ Browning Cole 1992, 58–59.

mentre l'ἀναμνήσκεσθαι è visto chiaramente come una funzione analoga ma superiore: esso esprime la capacità, solo umana, di ricordare riflettendo, di richiamare alla memoria ciò che si vuole, di selezionare delle esperienze e quindi di rivivere il passato.⁶⁵ Non esiste assolutamente, qui, la possibilità di confondersi; ma, se avessimo trovato l'accenno ad una μνήμη animale senza la contestuale menzione dell'ἀναμνήσκεσθαι, è probabile che ci saremmo trovati in imbarazzo. Lo stesso rapporto sussiste tra λόγος e λογισμοί; essi devono essere osservati relativisticamente, e le loro fluttuazioni di significato non possono essere concettualizzate oltre un certo limite.⁶⁶

Una volta precisato che univoco risulta essere il criterio di valutazione che separa nettamente la specie umana da quella animale, riuscirà più chiaro individuare il grado di indipendenza di pensiero di Teofrasto rispetto ad Aristotele e all'intera tradizione peripatetica. Come si è già accennato, la tesi di fondo di Teofrasto contro il sacrificio animale prende le mosse dal modo come l'uomo arcaico, non dimentico ancora della *pietas* che abbracciava l'universo intero, sentiva i rapporti biologici di affinità. Le comuni ἀρχαί fisiche presenti in tutti gli esseri viventi dotati di percezione e di appetizione erano sentite dagli uomini, ancora digiuni di malvagità, con una valenza etica così forte da determinare, in base appunto alla "percezione della parentela" (ἡ περὶ τὸ συγγενὲς αἴσθησις),⁶⁷ il vincolo profondo della φιλία. Alla luce dunque di un tale modo arcaico di estendere il sentimento di 'amicizia' e di giustizia oltre i confini della propria specie, era inevitabile che Teofrasto giungesse a rifiutare l'uso dell'animale come paradigma di una tipologia psicologica umana, come lo specchio per mezzo del quale l'uomo può vedere se stesso. Si deve guardare all'animale per spiegare l'animale, senza subordinarlo alle nostre finalità con indebite e ingiuste analogie che lo rendono altro da sé.

Questa conclusione, se è giusta, offre una congrua chiave di lettura anche per gettare luce sulla posizione teofrastea in merito ad un problema molto in voga ai suoi tempi, e su cui è necessario spendere qualche parola.

⁶⁵ Cfr. Arist. *De An.* 453a2ss., dove il "richiamare alla memoria" è descritto come una sorta di συλλογισμός esclusivo dell'uomo, perché è appannaggio soltanto di chi è dotato di capacità di decisione; cfr. anche *Met.* 980b25ss.

⁶⁶ Si vedano, in proposito, altri passi raccolti e discussi dalla Browning Cole (1992, 49ss.), passi che confermano questa linea interpretativa.

⁶⁷ 584A 191-92 FHS&G.

Gli animali, fin dall'inizio della produzione letteraria e della speculazione greca, furono utilizzati come specchio dell'uomo, come perno di similitudini intese ad illustrare caratteristiche umane come il coraggio, la resistenza, la combattività, la fedeltà, ecc. Queste doti erano, naturalmente, "belluine," e gli animali, nel loro complesso, godevano per lo più di un forte pregiudizio a sfavore. Esiodo,⁶⁸ pur nel suo pessimismo, era convinto che gli uomini e gli animali si dividessero per il possesso o il non possesso della giustizia. Un amabile personaggio di Plutarco, protagonista del dialogo (probabilmente giovanile) noto come *Gryllus*, uno degli esempi più spettacolari di letteratura paradossografica in senso filo-animalistico, imposta un ragionamento molto serio sul rapporto uomo-animale partendo proprio dall'uso omerico di attribuire agli eroi la forza del cinghiale, l'animo del leone, la mente del lupo, ecc.⁶⁹ Già in Omero, in sostanza, vige il principio dell'identificazione del carattere in base alla somiglianza esterna,

⁶⁸ Hes. *Op.* 274–79; come ha osservato Dierauer (1977, 16), gli elementi caratteristici del confronto esiodico uomo-animale si possono rilevare anche nelle riflessioni successive: "Immer wieder, wenn Menschen und Tiere einander gegenübergestellt werden, betrifft der Gegensatz Grundsätzliches und hat zugleich ethische Relevanz." Giova ricordare, ad esempio, che secondo DL 1.33 (= 11 A 1 DK) una delle tre cose di cui Talete ringraziava la *Tyche* era di essere nato uomo invece che bestia.

⁶⁹ Plutarco, con grande astuzia, evita di impostare un confronto basato sull'intelligenza, però osserva che, a questo specifico riguardo, le differenze tra un animale e l'altro sono minori di quelle che esistono tra un uomo e l'altro. L'analisi del *Gryllus* non può spingersi oltre i limiti imposti dal genere, giocoso e paradossale; ma non c'è dubbio che l'autore faccia sul serio allorché descrive le sevizie che gli animali devono sopportare da parte dei loro onnivori padroni. Il mezzo letterario impiegato, cioè la *detorsio* comica del noto episodio di Ulisse e Circe, non sembra per altro una pura e semplice invenzione plutarchea. Una studiosa francese, O. Touchefeu-Meynier ("Ulysse et Circé: notes sur le chant X de l'Odyssée," *REA* 93 [1961] 264ss.), ha preso in esame una serie di testimonianze fittili relative all'episodio omerico di Circe. In una *lektythos* più o meno databile alla fine del VI sec., il pittore ha istoriato delle figure ibride, uomini con teste di animali, che il contesto figurativo induce a riferire agli *hetairoi* di Ulisse trasformati in bestia. Questi personaggi non sembrano per nulla afflitti dalla loro nuova condizione; al contrario, essi danzano e battono il ritmo con strumenti musicali. Si tratta della versione alternativa dell'episodio di *Odissea* X, una versione priva di consacrazione letteraria ma assai antica. La studiosa va troppo avanti con le ipotesi, perché è impossibile dimostrare—anche se la cosa è attraente—che anche il poeta odissiaco tenne conto di questa versione alternativa, mescolandola con l'altra, cupa e sinistra. Ma, quel che ci interessa notare, qui, è che l'eulogia della condizione animale non fu solo una conquista filosofica 'alta' fatta propria, per esempio, dal cinismo: essa infatti era stata accompagnata, se non preceduta, da un filo-animalismo popolare forse umoristico, ma non senza venature di serietà.

all'attributo fisico.⁷⁰ E' quello che, con vocabolo tardo, prenderà il nome di fisiognomica, una "scienza" già viva nel V sec., ma che dovrà attendere Aristotele per manifestarsi in tutte quelle caratteristiche che poi le rimarranno tipiche (spirito nomenclatorio, impostazione compiaciutamente meccanicistica, ricerca di modelli normativi, ecc.). Insieme al *Corpus Aristotelicum* viaggia anche un trattato fisiognomico più tardo (di cui ci occuperemo tra poco), che certamente non è di Aristotele. La sua attribuzione aristotelica, e in generale il suo chiaro taglio peripatetico, hanno indotto gli studiosi a cercare sprazzi di teoria fisiognomica anche nell'Aristotele autentico, e la ricerca non è stata vana.⁷¹ L'abbondanza dei passi raccolti dimostra che la comparazione uomo-animale era per Aristotele un punto fermo del suo discorso in campo biologico e metaforico. Partendo dal fatto che l'animale è da porsi su un gradino nettamente inferiore rispetto all'uomo, il filosofo non pensa mai a questo rapporto nei termini positivi dell'*οἰκειότης* teofrastea, che ha come imprescindibile fondamento il riconoscimento dell'autonomia dei due mondi, ma le somiglianze riscontrate hanno in genere uno sfondo negativo: allorché l'uomo e l'animale entrano in rapporto ciò avviene perché il primo, per qualche motivo, scende al di sotto del suo livello e rivela la propria "perversione bestiale,"⁷² tradendo

⁷⁰ L'evoluzione del tema del rapporto uomo-animale e i suoi nessi con i diversi filoni del pensiero greco sono stati studiati, oltre che dal già citato Dierauer, da M. Vegetti, *Il coltello e lo stilo* (Milano 1979 [1987]). Dello stesso studioso vedasi ora anche "Figure dell'animale in Aristotele," in AA. VV. *Filosofi e animali* 1994, 125–37.

⁷¹ Cfr. *Anal. Pr.* 70b; *De An.* 421a; *HA* 488b, 491b, 494b, 538b, 588a, 608a; *PA* 648a, 650b, 667a; *GA* 709b, 774a, 786b.

⁷² Arist. *EN* 1149a2–3, 23; cfr. 1150a2ss.: da qui si evince che per Aristotele la bestialità umana corrisponde all'*ἀκρασία* solo καθ' ὁμοιότητα e κατὰ μεταφoράν. Su questo stereotipo della bestialità per cui da sempre l'animale viene chiamato in causa "per pagare, facendo da specchio alla depravazione umana" si veda, in generale, M. Midgley, "Il concetto di bestialità," in T. Regan e P. Singer, *Diritti animali, obblighi umani*, trad. it. (Torino 1987) [Prentice-Hall, inc., 1976] 99. Si noti che Aristotele vede la presenza dell'uomo bestiale soprattutto tra i barbari (*EN* 1145a30). Sugli esempi aristotelici della "ricaduta degli uomini verso il comportamento animale, dipinto coi tratti più orridi e sanguinari ..." vedasi ora S. Gastaldi, *Le immagini della virtù. Le strategie metaforiche nelle "Etiche" di Aristotele* (Torino 1994) 130–33. Cfr. anche M. M. Sassi, *La scienza dell'uomo nella Grecia antica* (Torino 1988) 53ss. Va a questo punto notato che, testimone Stobeo (*Anth.* 2.31.124 = 465 FHS&G), anche Teofrasto ricorre metaforicamente al linguaggio animale quando esorta ad "ammansire le anime" attraverso l'educazione, "capace di rimuovere la brutalità e l'insensatezza" (ἀφαιρούσα τὸ θηριῶδες καὶ ἄγνομον). Dal contesto emerge chiaramente che per Teofrasto gli

così le sue origini e i suoi doveri etici, che devono sempre essere improntati al dominio dell'impulsività e alla virtù della moderazione. Possiamo pertanto affermare che la non discontinuità fra uomo e animale messa in campo da Aristotele è particolarmente significativa in riferimento ai caratteri psicologici. Tale rapporto di analogia è reso particolarmente manifesto dall'osservazione dell'età infantile: "Nei bambini infatti è dato scorgere come delle tracce e dei germi di quelli che diventeranno in futuro i tratti del loro carattere, benché la loro anima in quel periodo si può dire non differisca affatto da quella delle bestie: dunque non vi è nulla di assurdo se i caratteri psichici degli altri animali ora sono identici, ora prossimi, ora analoghi a quelli dell'uomo."⁷³ Questa continuità animale-bambino-uomo risponde, per Aristotele, al principio di continuità della natura,⁷⁴ per cui è impossibile stabilire il confine tra i due campi e decidere a quale di essi appartenga l'ambigua zona intermedia. Analogia da un lato, alterità dall'altro sono dunque i terreni su cui Aristotele, in vista del suo approccio antropologico al problema, mette a confronto le caratteristiche dell'uomo e quelle degli animali.

All'interno di questa problematica è indubbio che il IV sec. e il successivo, proprio grazie ad Aristotele, agli Stoici, all'attività dei poeti comici, discusse il rapporto uomo-animale con estrema attenzione, spesso con bellicoso spirito di σύγκρισις. Il piano dialettico non è sempre favorevole all'uomo, ma le virtù animali vengono messe in campo solo come controcanto delle degenerazioni umane: di essi si loda la schiettezza, la semplicità, l'assenza di complicazioni; sono queste qualità il reale punto di contrasto con l'uomo, che è creatura sottile, sfuggente, ingannevole. Ci sono rimasti, di Filemone, tre frammenti molto interessanti ai fini della nostra discussione; nel primo (93 KA) gli uomini vengono rimproverati per la loro mutevolezza, e contrapposti agli animali i quali, invece, hanno un solo τρόπος e una sola natura. Essi dunque, al contrario dell'uomo, sono conoscibili, e le loro azioni si possono prevedere. La lode è, in parte, paradossale: la condizione animale è preferita a quella umana per via di un'immobilità, di un'ottusità che le sarebbe tipica: chi meno comprende meno soffre, e

impulsi irrazionalmente brutali, animaleschi, sono qualcosa di *intrinseco* all' 'animalità' della natura umana e non già il segno di una sua caduta nella 'bestialità' dell'animale.

⁷³ Arist. HA 588a31–b3.

⁷⁴ Cfr. PA 681a12–15; Phys. 199a23.

meno mezzi ha per ingannare. L'altro frammento (96 KA) contiene invece un apprezzamento diretto verso gli animali, chiamati "felicissimi" e "beatissimi" perché ignorano le fastidiose convenzioni umane, tra cui l'alienante schiavitù della δόξα, del dover essere in un certo modo solo per compiacere gli altri. Si affaccia il motivo della felicità degli animali, che possono contare su una libertà che l'uomo ignora: sono loro i veri uomini, anzi i veri filosofi.⁷⁵ Nel terzo frammento (195 KA), infine, si trova un'affermazione ancora più drastica, che val la pena di essere riportata:

οἷε τι τῶν ἄλλων διαφέρειν θηρίων
ἄνθρωπον; οὐδὲ μικρὸν ἄλλ' ἢ σχήματι·
πλάγι' ἐστὶ τᾶλλα, τοῦτο δ' ὀρθὸν θηρίον.

Quest'affermazione è interessante a prescindere dalla nostra ignoranza del contesto, che non ci permette di capire se il parlante godesse o no di una fisionomia etica positiva, e se il realismo contenuto in questa *sententia* fosse di tipo più leopardiano o più hobbesiano. Ma è evidente che, anche nel teatro 'argenteo,' il rapporto uomo-animale fosse oggetto di speciale attenzione, e quindi sentito dal pubblico come un tema di rilevante attualità. Orbene, è appurato che i *Caratteri* teofrastei sono legati a filo doppio con la produzione teatrale coeva. Perché allora—ripetiamo—le tipologie umane esaminate da Teofrasto non vengono mai fatte passare attraverso il filtro zoo-etico? Perché Aristotele, che aveva scavato un abisso tra l'uomo e l'animale, è purtuttavia assai più incline a confrontare l'uno con l'altro? La fondazione della fisiognomica fu attribuita, in antichità, sia a Pitagora che a Ippocrate,⁷⁶ che sono indubbiamente due nomi significativi. Esistevano, è vero, vari tipi di fisiognomica, e non è detto che questi due personaggi fossero per forza collegati con quel tipo che qui interessa a noi, cioè la fisiognomica zoo-etica; in ogni caso, sia Pitagora che Ippocrate, pur nelle loro diversità radicali, condividevano una caratteristica, ovvero quella di concepire tra l'uomo e l'animale una sorta di οἰκειότης di fatto; per quanto riguarda Pitagora e il pitagorismo arcaico, collegato ai precetti di ordine prevalentemente religioso relativi alla dottrina della trasmigrazione

⁷⁵ Al v. 2 τὰ θηρί', οἷς οὐκ ἔστι περὶ τούτων λόγος, il poeta non prende in realtà posizione sul λόγος, che è limitato da περὶ τούτων.

⁷⁶ Cfr. rispettivamente Porph. *Vita Pyth.* 13; Iambl. *Vita Pyth.* 17; Plin. *NH* 1.2; Gell. 1.9.2 e Galen. *Quod animi mor.* 4.797s. K.

delle anime in altri esseri non umani, una per così dire οἰκειότης oggettiva affiora già dal semplice fatto che uomini e animali potevano essere abitati dalla stessa anima⁷⁷ e che pertanto è ingiusto e orribile uccidere l'animale non in quanto animale ma in quanto posseduto da un'anima umana; quanto ad Ippocrate, è superfluo ricordare che il pensiero medico, a livello di comparazione anatomica, non può ammettere delimitazioni troppo nette tra l'uomo e la bestia.

Un'altra forma di οἰκειότης, stavolta esplicita e formalizzata, si trova in Teofrasto, ma essa non produce nessun principio euristico, nessun canone interpretativo in chiave etica, come se, contrariamente all'evidenza, non esistesse alcun cordone ombelicale tra uomo e bestia. Eppure la οἰκειότης teofrastea, esprimendosi e manifestandosi nella comunanza di πάθη, sarebbe stata la premessa ideale per cercare dei rapporti costanti tra l'uomo e l'animale. Di fatto, però, come si ribadisce, i *Caratteri* prescindono del tutto da quella che potremmo chiamare zoo-etica,⁷⁸ e anche questa è una circostanza che non si spiega con facilità, a meno di non pensare che per Teofrasto, appunto, gli uomini e gli animali, per quanto legati da una comune origine e da un comune destino, fossero pur sempre da concepire come due categorie inconfrontabili, refrattarie ad essere valutate con uno stesso metro. Il che potrebbe rientrare perfettamente nell'esigenza metodologica, profondamente radicata nell'abito scientifico di Teofrasto, di seguire il "metodo appropriato" al peculiare tipo di realtà che si intende fare oggetto di specifica indagine. Valutare dunque con la stessa θεωρία il comportamento della specie umana e di quella animale avrebbe comportato la plateale violazione di tale τρόπος, che deve essere diverso a seconda che ci si occupa delle realtà prime, o di quelle fisiche, giù giù fino agli esseri viventi, alle piante e, infine, alle cose inanimate.⁷⁹

⁷⁷ Cfr. Porph. *De abst.* 3.26.1. Cfr. *supra* n. 12. Su questo tema, collegato, fin dalle origini, al vegetarianismo orfico e pitagorico, rinvio a D. Sabatucci, *Saggio sul misticismo greco* (Roma 1965) 69–83.

⁷⁸ Cfr., in proposito, W. Lapini, "Il nome, la maschera, l'idiota," *Sandalion* 15 (1992) 67–68 e, *ivi*, n. 43. La cosa non sfugge neppure alla Browning Cole (1992, 59): "Thus animals are not used by Theophrastus as negative moral examples, nor is their customary behavior used as a source of analogies to human vice." Alla studiosa, per altro, sembrano sfuggire, invece, le ragioni di fondo di un siffatto atteggiamento, che si contrappone così radicalmente a quello di Aristotele.

⁷⁹ Il principio è concisamente enunciato, come un lapidario manifesto programmatico, in *Met.* 9a11; si veda anche, sempre dello stesso tenore, l'esplicita dichiarazione programmatica (riferita nello specifico all'impossibilità di stabilire una

La posizione singolare di Teofrasto, così lontana da quella di Aristotele per quanto riguarda le interferenze psicologiche uomo-animale, si muove per altro in una direttrice di pensiero che trova una certa rispondenza nel tono generale delle pagine introduttive del trattato fisiognomico dello Pseudo-Aristotele,⁸⁰ che la critica è abbastanza concorde nell'assegnare ad un'epoca non molto lontana dal primo Peripato. L'anonimo comincia col censire i vari tipi di fisiognomica disponibili, che grosso modo si possono ridurre a due, quello che parte dall'uomo e quello che parte dall'animale. Non è chiaro quale sia il metodo che l'anonimo preferisce, perché entrambi vengono severamente criticati. La fisiognomica antropocentrica non è affidabile, perché diversi ἔθνη possono esibire gli stessi σημεῖα. Inoltre, un uomo che sia ilare può diventare triste a seconda delle circostanze, a seconda che la sorte muti in meglio o in peggio. Osservando i σημεῖα con cui gli uomini manifestano i loro stati d'animo, dunque, non si può cogliere nulla di certo. Ma anche la fisiognomica zoocentrica è criticata; essa si fonda sull'errata convinzione che tra l'uomo e l'animale esista una ὁμοιότης in senso proprio, e non invece una somiglianza solo generica. Ma c'è anche un'altra critica, che per noi è più importante, ed è che neanche gli animali possono essere giudicati univocamente: il leone non è solo coraggioso, ma è anche altre cose; la lepre non è solo vile, ma anche altre cose. Fatte le debite differenze, si vede chiaramente come ai due tipi di fisiognomica sia rivolta, in sostanza, *la stessa critica*. Gli uomini gli uni con gli altri, e gli animali gli uni con gli altri, non sono blocchi monolitici, ma singole individualità mutevoli che è impossibile ridurre all'interno di una cornice; dal punto di vista dei σημεῖα, gli uomini tra loro e gli animali tra loro sono incomparabili; a maggior

corrispondenza completa tra animali e piante) in *HP* 1.1.4: ὅσα γὰρ μὴ οἶόν τε ἀφομοιοῦν περιέργον τὸ γλίχῃσθαι πάντως, ἵνα μὴ καὶ τὴν οἰκείαν ἀποβάλλωμεν θεωρίαν. Dell'importanza di una metodologia della ricerca cui non sfugga il "confine" (ὄρος) e la "delimitazione" (ἀφορισμός) entro i quali deve operare ogni specifica θεωρία, al fine di evitare indebiti sconfinamenti e fuorvianti analogie che potrebbero falsare i fenomeni osservati, mi sono occupato recentemente: cfr. A. M. Battezzatore 1992 (*supra* n. 14) 247–49 e "Il fluido che brucia," *Sandalion* 15 (1992; *re vera* 1993) 17–18. Si vedano anche, in proposito, S. Amigues, *Théophraste. Recherches sur les plantes*, T. I (Paris 1988) LXIV e, ora, soprattutto, le introduzioni alla *Metafisica* di M. van Raalte, *Theophrastus Metaphysics* (Leiden, New York e Köln 1993) 27, 431, 541–42, 486 e di A. Laks, *Théophraste, Métaphysique*, ed., tr. & comm. A. Laks e G. W. Most (Paris 1994) 12 e 17.

⁸⁰ [Arist.] *Physiogn.* 805a20ss.

ragione, dunque, l'insieme degli animali è incomparabile con l'insieme degli uomini. Ma si noti (ed è questo il succo del nostro ragionamento) che l'incomparabilità dell'uomo con l'animale non porta alla negazione di una οἰκειότης di fatto tra l'uno e l'altro, ma all'esatto contrario: la fisiognomica zoo-etica non serve, perché gli animali *sono troppo simili agli uomini*. Come i tipi umani, così anche i tipi animali non mostrano un unico σημεῖον per un'unica caratteristica, ma più σημεῖα. L'aggressività è tipica di un temperamento coraggioso, ma anche di un temperamento tirannico; la crudeltà può essere il segno saliente del leone, ma può esserlo anche dello sciacallo. Ciò detto, l'anonimo non codifica un metodo che possa essere definito suo personale, ma neanche consiglia di abbandonare l'indagine; egli invita invece a cercare ciò che è stabile, a vedere oltre i σημεῖα, oltre le apparenze, e soprattutto invita a osservare con attenzione le differenze, a non accontentarsi di un solo indizio.

Questo invito ricorda il tipico atteggiamento mentale circospetto di Teofrasto e, nella fattispecie, il metodo applicato nei *Caratteri*, opera che offre "a fine example of how the particular combination of observer and subject-matter determines the level of generalization."⁸¹ Volendoci dunque esprimere con pregnanza moderna, potremmo dire che, secondo l'anonimo, la ricerca non va impostata nel senso di individuare l' 'irato,' ma l' 'iroso,' non l' 'intimidito,' ma il 'timido' e così via.

Alla luce di tutte le considerazioni emerse da questo sguardo d'insieme, che concorre a meglio situare la problematica qui discussa nel contesto storico-culturale di cui è espressione, sembra lecito affermare che le implicazioni della lucida impostazione non antropocentrica conferita da Teofrasto al rapporto uomo-animale si pongono decisamente fuori, queste sì, dalla linea della razionalità scientifica di Aristotele, il quale, avendo escluso da filosofo morale qualsiasi vincolo di amicizia e di giustizia verso il mondo animale, da naturalista affronta il problema dell'uccisione profana dell'animale, prescrivendo una rigorosa metodologia che ha come fine l'osservazione e la conoscenza anatomica della natura delle vene. L'osservazione—annota Aristotele—⁸² "è difficile, ed è possibile raccogliere adeguate informazioni, se si ha un effettivo interesse per tali problemi, solo sugli animali uccisi per soffocamento dopo averli fatti dimagrire." Come è

⁸¹ Van Raalte 1993, 28 n. 2.

⁸² HA 513a12ss.

stato giustamente osservato,⁸³ l'atteggiamento intellettuale di Aristotele taglia alla radice l'arcaico "legame di amicizia e di simpatia fra l'uomo e l'animale." In questo caso il brutale dato empirico della modalità di uccisione dell'animale, inteso come mero oggetto di manipolazione, sembra per così dire neutralizzato dalla legittima esigenza disinteressata della conoscenza anatomica.

Una siffatta problematica non viene fatta oggetto di riflessione da parte di Teofrasto, perché, evidentemente, sulla base della testimonianza porfiriana, essa non è in connessione con i "punti principali" (κεφάλαια)⁸⁴ della teoria vegetariana contro i sacrifici animali e contro l'alimentazione carnea, vero motivo del sacrificio.⁸⁵ Ma dietro l'approccio di Aristotele, che uccide per sapere e non più per mangiare, c'è pur sempre, nell'ottica teofrastea, *sofferenza e privazione della stessa vita*, c'è l'atto strumentale di "derubare una vita," di "togliere l'anima," il che significa "commettere un'ingiustizia."⁸⁶

Prendendo spunto da questo richiamo ad agire con giustizia nei confronti di tutti gli esseri viventi, mette conto riflettere sulla motivazione di fondo fatta valere da Teofrasto, sempre secondo la testimonianza di Porfirio, al fine di estendere la nozione umana di "giustizia" (δίκαιον) al mondo animale. L'amara constatazione che, dopo l'avvento di Ares e del Tumulto, "nessuno risparmiava più alcuno degli esseri che gli erano affini," impone che il rapporto fra gli esseri viventi venga fondato su fondamenta che si ispirino al criterio sancito dal diritto positivo. L'argomentazione, introdotta dalla formula σκεπτόεν δ' ἔτι καὶ ταῦτα⁸⁷ usata con alta frequenza da Teofrasto per

⁸³ Cfr. Vegetti 1979 (*supra* n. 70) 29, dove lo studioso si occupa a fondo della classificazione aristotelica dell'animale vivo o morto. Vedasi ora, dello stesso Vegetti, "Figure dell'animale in Aristotele," in AA. VV., *Filosofi e animali*, 1994, 134: "Qui raggiunge il suo compimento la nobilitazione dell'animale come documento dell'ordine finalistico della natura. E qui comincia la lunga storia della dissezione, e poi della vivisezione animale, che avrebbe dominato la biologia e la medicina dagli alessandrini fino a Galeno."

⁸⁴ Porph. *De abst.* 2.32.3; 584A 381 FHS&G.

⁸⁵ Su questo specifico problema cfr. M. Detienne e J. P. Vernant, *La cuisine du sacrifice en pays grec* (Paris 1979) 9-10 [trad. it. Torino 1982].

⁸⁶ Cfr. rispettivamente Porph. *De abst.* 2.12.4 (= 584A 111-16 FHS&G); 2.22.2 (584A 201-3); 2.24.2 (584A 225-27); in Plut. *De esu* 996B incontriamo, attribuita a Senocrate, la condanna dell'uccidere l'animale perché tale atto "strappa la vita" a un altro essere.

⁸⁷ *De abst.* 2.22.2 = 584A 195 FHS&G. Cfr., in proposito, Battezzatore 1992, 252 n. 23.

sottolineare il carattere particolarmente impegnativo del passaggio a un successivo nucleo argomentativo,⁸⁸ si presenta profondamente eterodossa rispetto alla visione etica aristotelica:

“Come noi, nonostante l'apparentamento (οἰκειότητος) che ci lega agli uomini, riteniamo che si debba (δεῖν) sopprimere e punire (ἀναιρεῖν ... καὶ κολάζειν) i facitori di male, che sono trascinati da una sorta di soffio della personale natura e indole malvagia (καθάπερ ὑπὸ τινος πνοῆς (τῆς) ἰδίας φύσεως καὶ μοχθηρίας) a nuocere a chi s'imbatte in loro (τὸν ἐντυγχάνοντα), così, fra gli animali privi di ragione, sopprimere quelli ingiusti nella loro natura e dannosi e spinti dal loro istinto a nuocere a chi li avvicina (τοὺς ἐμπελάζοντας), molto probabilmente è conveniente (ἴσως προσήκει); di contro, distruggere e uccidere (ἀναιρεῖν τε καὶ φονεύειν) dei rimanenti animali (τῶν λοιπῶν ζώων) quelli che non commettono alcun atto ingiusto, e che non sono spinti dall'istinto a nuocere, è senza dubbio ingiusto, come lo è anche nei confronti degli uomini che si comportano in modo siffatto.”⁸⁹

Il ragionamento analogico ha come sottofondo la nozione teofrastea di vincolo biopsicologico di “parentela” (οἰκειότης) fatta valere come imprescindibile punto di riferimento del rapporto *oggettivo* che intercorre tra gli esseri viventi. Ma la teofrastea rigorosa delimitazione di campo tra specie umana e specie animale, su cui abbiamo tanto insistito nelle pagine precedenti, non viene affatto persa di vista, come si evince dal fondamentale elemento di scarto che caratterizza l'analogia tra i comportamenti umani e quelli animali. La σκέψις infatti procede attraverso un'esemplare calibratura concettuale nell'uso dei termini, a partire dal verbo δεῖν moralmente e giuridicamente obbligante, cui fa da *pendant* il meno marcato προσήκει, che attualizza la nozione della liceità di “eliminare” gli animali feroci, preceduto dall'avverbio ἴσως, che ritengo possa intendersi con valore blandamente asseverativo-deduttivo,⁹⁰ e non già con quello dubitativo che di

⁸⁸ Cfr. Pötscher 1964, 65 e, ora, Battegazzore 1992, 252 e, *ivi*, n. 23.

⁸⁹ *De abst.* 2.22.1–2 = 584A 195–203 FHS&G. Per quanto riguarda la distinzione fra animali innocui e animali nocivi, nonché il comportamento da tenere nei loro rispettivi riguardi, si vedano Xenocr. Fr. 98 H. = 252 I.; Porph. *Vita Pyth.* 39; Iambl. *Vita Pyth.* 98; per quanto concerne Plut. *De soll. an.* 964F, cfr. *infra* n. 94. Il motivo della legittimità dell'uccisione degli animali feroci è antico e tradizionale. Esso appartiene alle descrizioni dello sviluppo della civiltà umana (cfr. Plat. *Prot.* 322B; Democrito, in Diod. 1.8.2 = B 5 *bis* DK).

⁹⁰ Il valore asseverativo dell'avverbio è accentuato in modo eccessivo dal Pötscher (1964, 70) che intende così sottolineare la δίκη ἴση che intercorre tra uomini e animali: “so ist es gleichermassen Recht.”

solito le traduzioni gli conferiscono, in quanto nulla autorizza a pensare che la procedura argomentativa denoti incertezza nello scrivente. A ciò si aggiunga, come elemento decisivo, il fatto che nella conclusione del capitolo successivo si ribadisce in forma pienamente asseverativa che “certamente è conveniente eliminare una sola delle due categorie di animali” (ἀναίρειν γε μέντοι τούτων ἕτερ’ ἅττα προσήκει).⁹¹

Importa comunque subito evidenziare il concetto di alto profilo che le parole impiegate fanno venire in superficie: alla necessità, richiesta dalla prassi giudiziaria, di eliminare e al *dovere di punire* l'uomo che volontariamente fa il male per “malvagità d'animo” (μοχθηρία),⁹² segue, nel secondo membro della comparazione, l'isolato ἀναίρειν, a significare che la soppressione di questi “esseri viventi privi di ragione,”⁹³ se pure è ammissibile in quanto conseguenza di un atto che si configura come oggettiva violazione della οἰκειότης, non li rende per questo individualmente “ingiusti.” Questa presa di coscienza non comporta, quindi, il dovere della “punizione,” in quanto gli animali, intesi sotto questo rispetto come un *totum*, sono ‘incolpevoli’ per la loro

⁹¹ *De abst.* 2.23.2 = 584A 215 FHS&G. E' opportuno rilevare che ἴσως è impiegato da Teofrasto, come per altro da Aristotele, con altissima frequenza. Per quanto riguarda specificamente Teofrasto, l'uso dell'avverbio contribuisce a caratterizzare il suo peculiare procedimento argomentativo, che conserva sempre, a livello formale, l'impronta della cautela. Su alcuni impieghi significativi di ἴσως vedasi ora Van Raalte 1993, cit., 4 e 127, dove, a proposito di *Met.* 4b13–16 (ἀνάγκη δ' ἴσως ... διαμένει), la studiosa osserva giustamente che l'aggiunta dell'avverbio “in itself does not necessarily weaken the force of the ἀνάγκη involved,” e cita a sostegno l'annotazione di H. Bonitz (*Index Aristotelicus* (Berlin 1961), a proposito di 347b32–34): “saepe ἴσως non dubitantis est, sed cum modestia quadam asseverantis.”

⁹² Il significato del termine, alla luce dell'intero contesto, rinvia indubbiamente, in senso generale, alla ben nota posizione di Protagora sul concetto di ingiustizia e di pena (cfr., e.g., Plat. *Prot.* 323A–324D), e, più direttamente, alle nozioni aristoteliche di azione volontaria e involontaria, desunte anche dalla pratica giudiziaria. Nella prospettiva antisocratica di Aristotele, sempre la “malvagità è volontaria,” come dimostrano gli stessi legislatori, che “puniscono e infliggono pene a coloro che compiono azioni malvage” (*EN* 1136b16–24). Per la nozione di danno involontario, come tale non imputabile a “malvagità,” cfr., e.g., 1135b24 (οὐ γὰρ διὰ μοχθηρίαν ἡ βλάβη), 1146a3, 1149a17. Sulla distinzione tra volontario e involontario in Aristotele, in riferimento alla pratica giudiziaria ateniese, cfr. R. Sorabji, *Necessity, Cause and Blame. Perspectives on Aristotle's Theory* (London 1980).

⁹³ A favore di chi, con ragione, ritiene che in questo nucleo argomentativo venga riprodotto fedelmente non solo il pensiero, ma le parole stesse di Teofrasto, milita certamente l'espressione ἄλογα ζῷα, che Porfirio, come già fece notare il Pötscher (1964, 67), non avrebbe potuto impiegare esponendo il proprio punto di vista, in quanto egli rifiutava esplicitamente la tesi in base alla quale gli animali sarebbero ἄλογα (cfr., e.g., *De abst.* 3.2.8).

stessa inconsapevolezza di fare il male.⁹⁴ Il grande limite posto da Teofrasto alla sua θεωρία analogica, che, per restare οἰκεία, deve evitare deprecabili e fuorvianti sconfinamenti, sta proprio in questo punto decisivo: l'affinità oggettiva, a livello di ἀρχαί biopsicologiche, tra αἴσθησις della specie umana e αἴσθησις della specie animale, esclude necessariamente, per quanto riguarda il rapporto dell'uomo con l'animale, il momento della κόλασις, che deve entrare in gioco solo nel contesto delle valutazioni morali che ineriscono alla sfera peculiare del λόγος regolante i rapporti tra gli uomini. Da qui il sussistere di un rapporto normativo che, pur scaturendo dal terreno comune dell'οἰκεῖον, non inglobi indiscriminatamente i suoi termini, facendo così salva la separatezza del piano umano e di quello animale. Una volta messa in campo, in piena sintonia con Aristotele, la funzione distintiva e decisiva del λόγος, Teofrasto si stacca nettamente dal suo predecessore affermando l'esigenza di entrare in rapporto con un'alterità che non è sentita come estraneità: "sopprimere" infatti gli animali mansueti, che praticano istintivamente il solidale sentimento della οἰκειότης, significa compiere una sopraffazione, che si configura esplicitamente come "atto delittuoso" (φονεύειν).

L'impostazione e lo svolgimento della σκέψις porta il sigillo teofrasteo dell'essenzialità e di una limpida e rigorosa razionalità,⁹⁵ radicata entro una visione degli esseri viventi che scavalca nettamente la

⁹⁴ Un segno distintivo della paternità teofrastea della concezione etico-giuridica che sottostà a questa non menzione della punizione, nella norma che regola il comportamento degli uomini nei confronti degli animali offensivi, possiamo ricavarlo dall'estensione indiscriminata, da parte di Plutarco, della punizione agli animali feroci nel passo già citato (cfr. n. 89) del *De soll. an.* 964F, dove leggiamo che "non commettono ingiustizia coloro che, mentre da un lato *puniscono* e uccidono gli animali insocevoli (ἄμικτα) e dannosi, dall'altro addomesticano quelli mansueti e amici degli uomini, facendoli collaboratori in quelle opere per le quali ciascuno di essi è dotato per natura." La norma, in riferimento al punire, si basa in questo caso su un criterio perfettamente analogico, che non prevede quindi distinzione alcuna tra comportamento degli uomini nei riguardi degli animali e comportamento degli uomini tra di loro. Questo perfetto vincolo giuridico reciproco (*De soll. an.* 962A–B; Fr. 169 Sandbach) si spiega con la convinzione di Plutarco che gli animali partecipano, in forma minore o maggiore, di una forma di ragione (*De soll. an.* 962B). Assistiamo così a una ripresa banalizzata e imprecisa, da parte di Plutarco, della limpida e differenziata posizione teofrastea.

⁹⁵ Quanto qui si riscontra, in fatto di trasparenza espressiva e concettuale, risulta in perfetta sintonia con la peculiare *dictio* di Teofrasto e con il principio da lui stesso formalizzato di κατὰ τὴν οἰκείαν προσηγορίαν εἰπεῖν (*CP* 6.1.2; cfr. anche *HP* 9.8.5–6). Si veda anche Demetr. *De eloc.* 114 = 686 FHS&G, dove, con i termini οἰκεῖον ἀπαγγελίαν, si intende definire come "appropriata" quell'espressione del pensiero

dottrina aristotelica della φιλανθρωπία, incentrata, come è ben noto, sul principio ideologico secondo cui οἰκεῖον ἅπας ἄνθρωπος καὶ φίλον,⁹⁶ principio fondato sulla convinzione che l'uomo rappresenta il vertice nell'ordine gerarchico finalistico dell'universo. Entro tale orizzonte culturale l'uso degli esseri viventi non pensanti come meri 'strumenti inanimati' trova la sua piena e rassicurante legittimazione utilitaristica. Nei confronti di tali esseri non sussistono infatti obblighi di sorta, né contro di loro può essere perpetrata forma alcuna di ἀδικία, in quanto esclusi sia da un rapporto di φιλία sia di δίκαιον: φιλία δ' οὐκ ἔστι πρὸς τὰ ἄψυχα οὐδὲ δίκαιον. ἀλλ' οὐδὲ πρὸς ἵππον ἢ βοῦν, οὐδὲ πρὸς δοῦλον ἢ δοῦλος. οὐδὲ γὰρ κοινόν ἐστιν.⁹⁷

Il pensiero animalistico riconducibile a Teofrasto si colloca dunque in modo netto entro un sistema di valori che, procedendo da un'indagine biologica, trascendono completamente la visione naturale della φιλανθρωπία propria di Aristotele,⁹⁸ il cui ordine gerarchico, antropocentrico e finalistico, si iscrive lungo un asse che porta alla filosofia stoica e, più specificamente, alla posizione radicale di Crisippo, che svilupperà la teoria del mondo retto e governato al suo interno da una provvidenza antropocentrica.

che non travalica il legame oggettivo che deve intercorrere tra la realtà e il linguaggio che la esprime. Sull'οἰκειότης linguistica di Teofrasto cfr. Battezzatore 1992, 232–33.

⁹⁶ Aristot. *EN* 1155a20. Per una visione più completa del modello sociale della συγγενική φιλία, che ha come punto d'avvio l'amore del genitore verso il figlio e che via via si estende per cerchi sempre naturalmente relazionali, cfr. *EN* 1161b–1162a.

⁹⁷ Aristot. *EN* 1161b1–3.

⁹⁸ Sbrigativa e fuorviante risulta pertanto la "nota complementare" (251) di M. Patillon, a commento del λόγος teofrasteo presente in *De abst.* 3.25.3 = 531.12–14 FHS&G. Lo studioso infatti sembra non capire che l'idea della φιλανθρωπία presente in questo passo, che non va per altro isolato dal contesto più ampio, è sì da intendersi come "amour des hommes en général," ma il nucleo argomentativo di Teofrasto mira ad affermare che tutti gli uomini e tutti gli animali appartengono al medesimo sistema biologico perché "i principi costitutivi dei loro corpi sono per natura gli stessi" (αἱ γὰρ τῶν σωματίων ἀρχαὶ πεφύκασιν αἱ αὐταί). Da qui poi la conclusione che l'amore abbraccia tutti gli esseri viventi. Mi chiedo come si possa ricavare dal passo teofrasteo la convinzione che il sentimento naturale della φιλανθρωπία, "considerato sempre come un'idea stoica," in realtà "esiste già in Teofrasto e persino già in Aristotele." Anche in questo caso l'incomprensione dei testi, di per sé trasparenti, nasce da un pregiudizio di fondo del tutto arbitrario, ossia che Teofrasto debba essere inserito ad ogni costo in un sistema *antropocentrico* di valori, un sistema che, come si è già visto e come avremo modo di chiarire ulteriormente, non è per nulla consono al filosofo-scienziato di Ereso.

Il nucleo argomentativo del pensiero animalistico di Teofrasto viene messo in campo da Porfirio per combattere con armi dialettiche adeguate l'argomento stoico a favore dell'uccisione degli animali, argomento, come è ben noto, basato fondamentalmente sul concetto che è far violenza al pensiero il voler porre sullo stesso piano chi è privo di ragione e chi la possiede, secondo un criterio di giustizia aritmetica che non tiene conto di questa radicale ἀνομοιότης, sufficiente da sola a escludere qualsiasi sorta di "communio iuris."⁹⁹

E infatti proprio la posizione animalistica di Crisippo, fondata sul principio secondo cui "coloro che non sono in grado di esercitare la giustizia nei nostri confronti neppure possono subirla da parte nostra,"¹⁰⁰ sembra in qualche modo entrare in gioco nel passo successivo, che funge da definitiva conferma del ragionamento teofrasteo:

ὁ δὲ καὶ ἐμφαίνειν ἔοικεν (ἐν) δίκαιον ἡμῖν μηδὲν εἶναι πρὸς τὰ λοιπὰ τῶν ζώων, διὰ τὸ βλαβερὰ ἅττα τούτων εἶναι καὶ κακοποιὰ τὴν φύσιν, τὰ δὲ μὴ τοιαῦτα, καθάπερ καὶ τῶν ἀνθρώπων.¹⁰¹

La frase ὁ δὲ ... ζώων, nel testo tramandato, afferma che non sussiste alcuna giustizia tra noi e gli animali e questa dichiarazione nega in modo plateale quanto precede, come ben s'avvide il Bernays il quale, al fine di ripristinare "den Gang der Argumentation," giudicò necessario ricorrere alla lieve integrazione ἔοικεν (ἐν) che avrebbe consentito così di raggiungere "den vom Zusammenhang geforderten Begriff des

⁹⁹ Cfr. DL 7.129 = SVF 3.367: "Essi [gli Stoici] pensano che non esista una giustizia nei confronti degli animali a causa della nostra dissomiglianza da essi, come dice Crisippo nel libro I *Della giustizia*"; Cic. *De Fin.* 3.20, 67 = SVF 3.371. Una posizione analoga a quella stoica, fondata su argomenti utilitaristici e su un concetto della giustizia di tipo contrattualista, si riscontra in un lungo brano, riportato sempre da Porfirio (*De abst.* 1.7–12; 3.12ss.), dell'epicureo Ermarco. In particolare in 1.11.3 [= 24 Krohn] si sostiene che anche gli animali inoffensivi, se si lasciasse loro la possibilità di moltiplicarsi, diverrebbero dannosi per la specie umana. Come ha osservato Isnardi Parente (1988 [*supra* n. 24] 79), ci troviamo qui di fronte a una sorta "di argomento malthusiano *ante litteram*". Sulla presenza di una possibile polemica di Ermarco condotta nei confronti della posizione di Teofrasto, contraria all'uccisione degli animali mansueti, si veda E. Bignone, *L'Aristotele perduto e la formazione filosofica di Epicuro* (Firenze 1936 [1973]) 617ss. Per la polemica antiepicurea di Porfirio cfr. V. Goldschmidt, *La doctrine d'Epicure et le droit* (Paris 1977) 55–56.

¹⁰⁰ Plut. *De soll. an.* 964B; cfr. 970B. Sulle argomentazioni utilizzate da Plutarco per confutare la dottrina stoica vedasi Santese 1994 (*supra* n. 37) 152–54.

¹⁰¹ *De abst.* 2.22.3, 584A 203–6 FHS&G. Cfr. Sorabji 215 *supra*.

'einheitlichen' Rechtsverhältnisses."¹⁰² Il passo in questione riprende pressoché fedelmente il noto motto di Crisippo μηδὲν εἶναι πρὸς τὰ ζῷα δίκαιον ἡμῖν¹⁰³ che capovolge senza alcun dubbio la prospettiva di Teofrasto. Orbene, per l'indiscutibile ragione cronologica che Crisippo è posteriore a Teofrasto, verrebbe da pensare di primo acchito che qui Porfirio, messo da parte il λόγος teofrasteo, replichi in prima persona, con ironia o con aperta volontà di denuncia, al filosofo stoico utilizzando il suo stesso linguaggio.¹⁰⁴ Questa soluzione interpretativa presuppone un'audace brachilogia e, ciò che più conta, non tiene conto del fatto che l'affermazione in questione, seguita dal ribadimento della

¹⁰² J. Bernays, *Theophrastos' Schrift über Frömmigkeit* (Berlin 1866) 179.

¹⁰³ Cfr. Plut. *De esu* 999B = SVF 3.374. In verità Plutarco in 999A riporta la frase di Crisippo in modo un po' diverso rispetto a 999B. Essa infatti suona così: ναί, φησιν, οὐδὲν γὰρ ἡμῖν πρὸς τὰ ἄλογα οἰκεῖόν ἐστι. Si tratta in sostanza della stessa massima, ma con una significativa differenza lessicale, che ha portato lo Stephanus alla correzione di οἰκεῖον in δίκαιον. G. O. Bernadakis (*Plutarchi Moralia*, 6.1 [Lipsiae 1845]) accettò questa correzione, seguito dallo Arnim (SVF 3.374). C. Hubert (*Plutarchi Moralia*, 6.1 [Lipsiae 1954]) invece mantiene correttamente il testo trádito οἰκεῖον. La questione è complessa e non può essere approfondita in questa sede. Ma va almeno rilevato che la *variatio* οἰκεῖον/δίκαιον di Plutarco non è cosa irrilevante e che nulla ci autorizza ad intervenire, senza motivate ragioni, sulla tradizione manoscritta per eliminare tale *variatio*. Si tratta di due termini chiave che in Teofrasto, per esempio, risultano di non dissimile valenza concettuale, intimamente connessi l'uno all'altro, al punto che ciascuno dei due può valere al tempo stesso come causa ed effetto dell'altro (cfr., in proposito, Pötscher 1964, 67–72). Che cosa ci impedisce poi di pensare che la formula originale di Crisippo fosse riportata da Plutarco in 999A e che subito dopo, in 999B, egli la riprendesse più liberamente per discuterla e confutarla? La valenza tecnica, dotata di forte densità teorica, del termine οἰκεῖον potrebbe far pensare a una polemica ripresa, da parte di Crisippo, di un termine chiave del pensiero animalistico di Teofrasto. Solo negando agli animali il possesso della sensazione, la capacità di sentire e il "sentimento di parentela per chi non può avere nulla di congeniale a sé" (Plut. *De Stoic. rep.* 1038B = SVF 2.724) Crisippo poteva contestare alla radice l'estensione al mondo animale del concetto di δίκαιον. Ma, ripeto, il problema, che qui mi limito a porre sul tappeto, merita di essere approfondito ulteriormente, alla luce anche della differenza semantica fra οἰκειότης teofrastea e οἰκείωσις stoica, in particolare crisippea (cfr. *supra* n. 24).

¹⁰⁴ Secondo S. Rocca ("Lo specchio oscuro. Diritti degli animali nei testi antichi," in AA. VV., *Mosaico. Studi in onore di U. Albini*, a cura di S. Feraboli (Genova 1993) 173 e, ivi, n. 62) Porfirio si servirebbe della formula di Crisippo per sottolineare ancor più l'ingiustizia perpetrata dagli uomini nei confronti degli animali. La studiosa ritiene pertanto che "leggendo in chiave ironica questo passo si può evitare la correzione di Bernays εἶναι ἐν = 'non c'è che una forma di diritto.'" Mentre rilevo la non corretta traduzione dell'assetto della frase con la presenza di (ἐν) (cfr. *infra* n. 107), osservo come questa sbrigativa soluzione del problema, che tira in ballo un presunto atteggiamento ironico di Porfirio, non tenga conto di insuperabili difficoltà interpretative collegate con il senso generale dell'intero contesto.

comparazione tra i differenziati comportamenti animali e quelli umani, risulta costruttivamente funzionale alla tesi centrale formulata nel capitolo successivo, dove gli uomini vengono posti dinanzi al dilemma, sacrificando qualsiasi animale agli dei, di compiere nei loro riguardi o un atto ingiusto (immolando animali innocui) o un atto empio (immolando animali “facitori di male”).¹⁰⁵

La questione, dunque, partendo dal testo tramandato dalla tradizione manoscritta, sembra irrisolvibile, per cui la geniale integrazione del Bernays,¹⁰⁶ anche se non dissipa del tutto le mie perplessità, potrebbe rivelarsi come l’unica soluzione possibile per dare un senso compatibile con l’insieme: “E ciò appunto sembra dimostrare che non esiste affatto una sola forma di giustizia tra noi e gli animali.” Restano comunque in piedi difficoltà ermeneutiche di non poco conto, che il Bouffartigue¹⁰⁷ crede invano di risolvere, ma delle quali intendo occuparmi in altra sede, perché esse richiedono una circostanziata indagine analitica. Qui basti dire che, con l’integrazione del Bernays, questo, in sostanza, potrebbe essere il senso generale ricavabile dalla frase controversa: rispetto agli animali intesi come un *totum*, noi non abbiamo lo stesso atteggiamento, ma facciamo delle distinzioni: siamo buoni con gli animali buoni, uccidiamo gli animali dannosi. Dall’applicazione di questi due risvolti del δίκαιον ne discende quindi che noi usiamo, anche verso gli animali, una forma di giustizia non indifferenziata, automatica, ma quella codificata dalla prassi giudiziaria, che si configura così—non

¹⁰⁵ *De abst.* 2.23.1–2 = 584A 207–15 FHS&G.

¹⁰⁶ Forse non si può neanche considerarlo un ritocco perché può essere esistita la grafia εἰς ἓν, quindi εἰσεν in *scriptio continua*, e, infine, il semplice εἰκεν. Si potrebbe quindi trattare di qualcosa di meno di una correzione.

¹⁰⁷ *Porphyre. De l'abstinence*, edd. J. Bouffartigue e M. Patillon, t. II (Paris 1979) 23 n. 2. Mi limito qui a segnalare che risulta gravemente ambiguo tradurre ἐν δίκαιον ... μηδὲν εἶναι con “il n’y a pas qu’une forme de droit entre nous et les autres animaux.” Si viene infatti a sostenere il contrario di quello che il testo greco dice. Imperfetta mi sembra anche la resa di Fortenbaugh *et alii*: “And this indeed also seems to show that for us in relation to the rest of animals justice is not something simple” (584A 203–4 FHS&G). Qui il termine *simple* corrisponde concettualmente a ἀπλοῦν, anche se non credo affatto che questo fosse l’intendimento del traduttore. Cercano invece di rimanere aderenti all’assetto della frase, che indubbiamente risente di una certa forzatura stilistica, le traduzioni del Bernays (“Hieraus ergibt sich wohl auch, dass keinerlei unterschiedlose Rechtsbestimmung für das Verhältniss zwischen der Mensch- und der Thierwelt zu finden ist ...”) e del Pötscher (“Dies scheint denn auch aufzuzeigen, dass wir kein einheitliches Rechtsverhältniss zu den übrigen der Lebewesen haben [können] ...”). Entrambe le traduzioni sottolineano il carattere *non* indifferenziato del δίκαιον praticato dagli uomini nei riguardi degli animali.

perdendo di vista il capitolo successivo—come l'unico rimedio secolarizzato per spezzare l'inscindibile connessione tra la violenza e il 'sacro' nel sacrificio agli dei.

Le implicazioni che emergono dall'intero passo porfiriano, sul quale abbiamo spostato il raggio della nostra attenzione, dimostrano dunque qualcosa di più rispetto a ciò che è costretto ad ammettere Bouffartigue in una nota al testo in questione: "La fidélité de Théophraste est ici en défaut [...]. Pour Aristote, aucun droit ne saurait interdire à l'homme de tuer un animal, quel qu'il soit."¹⁰⁸ Io credo che la presa di posizione di Teofrasto per quanto riguarda il problema del rapporto uomo-animale sia qualcosa di più di una "fidélité en défaut," perché scavalca nettamente l'atteggiamento intellettuale di Aristotele e, attraverso la dottrina della οἰκειότης segnata da una 'pietà' profondamente umana *in quanto* non teleologicamente antropocentrica,¹⁰⁹ diventa espressiva di

¹⁰⁸ Cfr. le "Notes Complémentaires" al libro II del *De abstinentia*, 209; lo studioso, invero, nell'introduzione (23 n. 2) aveva ancor più smorzato, in linea generale, la portata dell'eterodossia di Teofrasto nei confronti di Aristotele: "Il est d'autre part peu vraisemblable que Théophraste ait voulu se poser en contradicteur de son maître." Per quanto poi concerne lo "strappo" di Teofrasto nel II. Εὐσ., lo studioso si attiene alla linea interpretativa di Dierauer (1977, 177), secondo cui Teofrasto in quest'opera, destinata a convincere un vasto pubblico, si sarebbe limitato ad assecondare il sentimento popolare, senza che ciò comportasse alcun suo coinvolgimento di natura dottrinale. Su questo atteggiamento critico piuttosto diffuso, inteso a vedere una sostanziale continuità di pensiero tra Aristotele e Teofrasto, rinvio alle mie considerazioni conclusive e, in particolare, alla nota 124.

¹⁰⁹ Mi piace qui riprendere in parte, sia pure in un contesto concettuale diverso, le parole con cui M. van Raalte chiude la sua introduzione alla *Metafisica* di Teofrasto: "If, then, Theophrastus may be called a teleologist, his views about nature and the cosmos as a whole are clearly not anthropocentric—although, to go by the last words ascribed to him, they are decidedly human" (33). Le "ultime parole" cui allude la studiosa, che di esse si avvale per aprire la sua introduzione, sono quelle attribuite da Cicerone (*Tusc. Disp.* 3.69 = 34A FHS&G) a Teofrasto, il quale, in punto di morte, avrebbe taciuto la natura di insensibilità per avere essa concesso agli esseri umani, a differenza della lunga vita assegnata ai cervi e alle cornacchie, che sono indifferenti della loro sorte, "tam exiguum vitam vitam [...], quorum si aetas potuisset esse longinquior, futurum fuisse ut omnibus perfectis artibus omni doctrina hominum vita erudiretur. querebatur igitur se tum, cum illa videre coepisset, extingui." La studiosa osserva molto opportunamente che, indipendentemente dal fatto che questo aneddoto sia o non sia falso, "it is a telling one—not only insofar as the conviction that everything is for the best is clearly absent, but also because it seems to bring out a certain awareness of being one constituent part of nature amongst others" (1). Per quanto concerne i limiti imposti da Teofrasto alla spiegazione teleologica, si veda, per esempio, *Met.* 10b26–11a1 con il giudizio conclusivo della Van Raalte (1993, 539), che io condivido pienamente.

una riflessione sul vivente che entra a far parte dell'“indagine sull'universo, sui principi costitutivi delle cose e sul modo come esse entrano in rapporto tra di loro.”¹¹⁰ L'impegno tenacemente profuso nel non disperdere le specificità delle θεωρίαι non collide dunque con l'esigenza di adottare, quando ciò è possibile, una “indagine sull'universo” (ἡ τοῦ σύμπαντος θεωρία) entro la quale i settori specifici dell'indagabile e dell'intelligibile si configurano come un vasto reticolo di corrispondenze e di differenze, tutte ugualmente degne di studio, sia pure all'insegna spesso del dubbio.

Si potrebbe aprire, a questo punto, la *quaestio* se la fondazione teologica dell'ordine gerarchico finalistico introdotta da Aristotele nell'universo, per cui l'animale è strumento dell'uomo, sia improntata a una concezione veramente antropocentrica. Nelle opere biologiche invero non sembra esserci gerarchia tra uomo e animale in senso antropocentrico: essi appartengono a sfere diverse legate da un rapporto di parità analogica suscettibile di essere posto sotto metafora. Si assiste così a un'ambiguità tra animale e uomo, inteso quest'ultimo come il prototipo degli animali. Un esempio, tra tanti, di questa equiparazione può essere HA 491a20ss. πρῶτον δὲ τὰ τοῦ ἀνθρώπου μέρη ληπτέον· ὥσπερ γὰρ τὰ νομίσματα πρὸς τὸ αὐτοῖς ἕκαστοι γνωριμώτατον δοκιμάζουσιν, οὕτω δὲ καὶ ἐν τοῖς ἄλλοις· ὁ δ' ἀνθρώπος τῶν ζώων γνωριμώτατον ἡμῖν ἐξ ἀνάγκης ἐστίν. Aristotele, giunto a parlare di una questione che riguarda l'essere vivente in quanto tale, dichiara di voler partire dall'uomo, una scelta che egli avrebbe potuto giustificare con motivazione assiologica. Egli invece rinuncia a tale ordine in favore della maggiore utilità didattica: la spiegazione riuscirà meglio se si parte

¹¹⁰ Theophr. *Met.* 12a1; cfr. 11b12ss. Sono queste le parole, concise all'estremo, con cui Teofrasto chiude la sua *Metafisica*. Esse sono precedute dal ribadito richiamo a “cercare di afferrare un qualche limite, sia nella natura e nella sostanza dell'universo sia nella finalità e nell'impulso verso il meglio” (11b25–27). Il passo ha dato luogo a interpretazioni contrastanti tra di loro in riferimento soprattutto alle implicazioni dottrinali più o meno divergenti rispetto alla concezione metafisica di Aristotele. Non entro ora nel merito del problema, ma rinvio, per una panoramica generale, al commento di Van Raalte (1993, 586–87), prestando qui particolare attenzione alla sua convincente conclusione, che viene a colludere con la mia specifica linea interpretativa: “This re-definition of the study we are dealing with seems to imply that metaphysics has for its object the cosmos as a whole and its constituent parts, *qua* whole and *qua* parts of the whole respectively; comparison of this conception with the Aristotelian conception of metaphysics as the study of being *qua* being might seem to be characteristic of the direction in which, to judge by his *Metaphysics*, Th. was inclined to develop the ideas of his predecessor.”

dal noto per arrivare al meno noto. Ma quando Aristotele affronta nella *Politica* il problema pratico del funzionamento della società umana e intende definire un'organizzazione sociale che garantisca il governo della comunità umana, allora, sotto questo rispetto almeno, la finalizzazione delle altre forme viventi all'uomo è proclamata utilitaristicamente in modo reciso: "Le piante sono fatte per gli animali e gli animali per l'uomo, quelli domestici perché li usi e se ne nutra, quelli selvatici, se non tutti, almeno la maggior parte, perché se ne nutra e se ne serva per gli altri bisogni, ne tragga vesti e altri arnesi. E poiché la natura non fa niente di imperfetto e niente senza un fine, è per l'uomo che li ha fatti tutti quanti."¹¹¹ Questa comunque è, ultimativamente, la prospettiva antropocentrica destinata a prevalere nell'etica ufficiale

¹¹¹ Arist. *Pol.* 1256b10–22; dall'intero contesto emerge in modo inequivoco che Aristotele rappresenta l'uomo come l'animale preminente nella scala della natura, ai cui bisogni sono gerarchicamente e strutturalmente soggetti gli 'altri animali'. Come osserva G. Lanata ("Antropocentrismo e cosmocentrismo nel pensiero antico," in AA. VV., *Filosofi e animali*, 1994, 27), qui viene enunciata "la tesi più forte dell' antropocentrismo: tutto il vivente è fatto per l'uomo." In Aristotele invero persiste indubbiamente un'irriducibile ambiguità tra la concezione dell'animale subordinato all'uomo e l'uomo come "uno degli animali." Si tratta dell'ambiguità tra l'Aristotele biologo e l'Aristotele etico e politico. In che misura incide questa ambiguità sull'analisi della struttura finalistica della realtà? Secondo W. Wieland (*La fisica di Aristotele. Studi sulla fondazione della scienza della natura e sui fondamenti linguistici della ricerca dei principi in Aristotele*, trad. it. Bologna 1993 [Göttingen 1970] 347–48), che ritiene "rappresentazioni popolari" i passi che alludono ad una "fondazione teologica della teleologia naturale," anche il passo della *Politica* 1256b15ss. andrebbe inquadrato nel contesto di una filosofia pratica nella quale Aristotele "può pure accontentarsi, per lo scopo che si ripropone, di concezioni popolari" (348). Ma per un approccio diverso a questo problema, esaminato sotto una prospettiva criticamente provocatoria e, per questo, stimolante, rinvio al contributo di D. Sedley ("Is Aristotle's Teleology Anthropocentric?," *Phronesis* 24 [1991] 179–96). La tesi di fondo dello studioso, che esamina anche passi della *Fisica* (in particolare 198b16–199b30), mira a dimostrare che per Aristotele non esiste soltanto una finalità che governa e regola la struttura interna e il funzionamento di ciascun organismo nella sua individualità, ma anche una più ampia teleologia interattiva: la struttura di tale teleologia si configura come antropocentrica, in quanto l'uomo risulta essere l'ultimo beneficiario della natura stessa, fermo restando che dio rimane l'ultimo e definitivo oggetto di aspirazione da parte dell'uomo stesso. In questa ottica le τέχνη, nel loro rapporto con la natura, sono pilastri fondamentali della concezione antropocentrica della teleologia aristotelica, in particolare le τέχνη che mettono in relazione l'uomo con gli animali e con i gradini inferiori della "catena alimentare" (cfr. 191–92). Sulla concezione 'androcentrica' del rapporto uomo e animale in Aristotele, quale si configura nella *Politica*, si vedano anche G. Sissa, "Il corpo della donna: lineamenti di una ginecologia filosofica," in S. Campese, P. Manuli, G. Sissa, *Madre materia. Sociologia e biologia della donna greca* (Torino 1982) 86 e D. A. Dombrowski, *The Philosophy of Vegetarianism* (Amherst 1984) 67.

della grecità¹¹² e a risultare vincente, sulla scorta della teodicea biblica, nei tempi lunghi della nostra civiltà occidentale.

Quanto a Teofrasto, le riflessioni che sono venute esponendo fin qui si inseriscono in una prospettiva che mi è cara, e a cui ho cominciato a dedicare la mia attenzione ormai da diversi anni. Non mi resta dunque che ribadire, anche a proposito del pensiero teriologico, un giudizio che credo sostenibile per tutte le articolazioni del pensiero teofrasteo. La razionalità scientifica di Teofrasto e la visione etica che in essa si iscrive non sono né un pedissequo prolungamento né un semplice aggiustamento marginale di quelle del maestro: egli infatti, pur muovendosi nell'ambito della poderosa θεωρία unificante del suo predecessore, approda a rilevanti sviluppi di pensiero attraverso il consapevole impiego di una σκέψις più analitica e più vicina al suo proprio oggetto, più sensibile al problema metodologico di saldare la ricerca a ciò che le è οἰκεῖον. Il principio metodologico enunciato da Teofrasto botanico, secondo cui τὸ δὲ μὴ οἰκεῖον οὐ ποιεῖ τὸ τῆς φύσεως¹¹³ vale per ogni aspetto del suo assai vivo interesse naturalistico e gli consente di recuperare in una nuova prospettiva razionale, destinata ad avere conseguenze rilevanti sul piano dell'etica, il senso autentico dell'unità, nella diversità, degli esseri viventi e del loro apparentamento.

Nella sua posizione di uomo di scienza e di filosofo morale, Teofrasto rivendica come base del rapporto sociale non più il diritto della πόλις, che Aristotele aveva considerato il prodotto naturale *perfetto* della possibilità di comunicazione tra gli uomini, ma la parentela universale dei viventi che sotto lo stesso cielo riempiono la terra, “focolare comune degli dei e degli uomini,”¹¹⁴ e che, a livello biopsicologico, hanno in comune le ἀρχαί e le δυνάμεις, gli umori, i tessuti, le emozioni. Qui sta la ‘modernità’ di Teofrasto. Essere coscienti, infatti, di questa “parentela” significa non rinunciare mai ad interrogarsi sul valore

¹¹² Sull'influenza esercitata da Aristotele nel mondo antico, per quanto riguarda il rapporto uomo-animale, si veda Detienne e Vernant 1982 (*supra* n. 85) 14: “I Greci dividono il mondo animale in due parti: gli animali cui viene data la caccia per i danni che possono arrecare, e quelli protetti per i servizi che da essi è legittimo aspettarsi. L'etica ufficiale, codificata da Aristotele, insegna che gli uomini devono utilizzare gli animali per i loro fini e che, se vi rinunciassero, correrebbero il serio pericolo di condurre a loro volta una vita da bestie. Del resto i servizi resi da certi animali sono riconosciuti solo in quanto confermano che la bestia si trova ‘a una certa distanza’ dagli uomini.”

¹¹³ CP 6.17.12 (a proposito del nutrimento); cfr. anche 2.7.1; 5.15.2; 6.19.1.

¹¹⁴ Porph. *De abst.* 2.32.1 = 584A 372–73 FHS&G.

straordinario della vita e, ai nostri occhi di moderni, significa anche tentare di recuperare finalmente il bisogno della "pietà" come unico segno della supremazia dell'uomo in quanto tale, caricato del peso della conoscenza.

Per concludere, credo di poter affermare che gli studiosi del pensiero zoologico peripatetico, oggi al centro di crescenti attenzioni, si dividono principalmente su una questione: se Teofrasto si sia emancipato da Aristotele, o se, malgrado marginali disaccordi e caute sfumature di cui si è cercato di dar conto, si sia mantenuto sostanzialmente nel solco tracciato dal maestro. Se anche a me appartiene la convinzione che gran parte degli elementi dottrinali di Teofrasto portano l'inevitabile impronta della possente e sistematizzante personalità scientifica di Aristotele, io tuttavia non faccio parte dei "continuisti"¹¹⁵ e, quindi, non posso condividere le conclusioni a cui, per esempio, giunge ora Eve Browning Cole nel contributo più volte citato, un contributo per altro non privo di acribia e dottrina e scritto con rara grazia ed eleganza. In esso la studiosa suggerisce che la differenza tra Aristotele e Teofrasto, nel concepire il rapporto uomo-animale, può essere circoscritta in una "questione di enfasi" (61), e che "this kind of difference of emphasis could be found even between two thinkers who shared *all* substantive beliefs about the extent of animal intelligence" (*ibid.*). Questo modo di concepire la collaborazione e i rapporti intellettuali all'interno del Peripato darebbe certo la migliore e definitiva risposta al problema qui esaminato, e anche a molti altri problemi compositivi sia del *Corpus Aristotelicum* sia del *Corpus Theophrasteum*.¹¹⁶ Inoltre, questo tipo di collaborazione è precisamente quello che noi siamo portati ad aspettarci in base a quanto sappiamo della scuola peripatetica. Tuttavia, ahimé, noi non abbiamo prove dirette di opere peripatetiche scritte a quattro mani, anche se non è difficile immaginare la realtà storica di un "laboratorio" dominato da uno spirito di franca e libera ricerca, in cui le personali diversità di sentire non guastassero l'unità dottrinale di fondo. Ma,

¹¹⁵ In generale, per una più precisa conoscenza del modo in cui io interpreto il rapporto tra il sistema dottrinale edificato da Aristotele e la posizione critica assunta da Teofrasto all'interno di tale sistema, mi limito a rinviare al mio contributo "La posizione di Teofrasto tra metafisica e fisica," *Epistemologia* 12 (1989), fasc. spec., 49-72.

¹¹⁶ Tra i problemi risolti ci sarebbe ovviamente anche quello dell'attribuzione dei libri VIII e IX della *Historia animalium*, come del resto la Browning Cole (1992) suggerisce a 44-45. Vedasi *supra* n. 41.

come noi conosciamo un Teofrasto ligio all'“ortodossia” del maestro e che ne accetta nelle linee generali l'impianto metafisico, così conosciamo un Teofrasto indipendente e incline a sollevare difficoltà preliminari, pronto non solo a inserire varianti nel quadro del pensiero di Aristotele, ma anche a revocare in dubbio alcune conseguenze sistematiche del basilare principio esplicativo secondo cui “la natura non fa nulla invano,” un Teofrasto insomma aperto a un'aporetica persino rinunciataria e che, talvolta, sembra sconfinare in una sorta di scetticismo per quanto concerne la spiegazione teleologica della causalità.¹¹⁷

Quando la materia in discussione si riduce al maggiore o minore grado di distanza tra esseri viventi pensanti e non pensanti, o alla più o meno grande presenza della componente emozionale e dell'entità delle facoltà psichiche attribuibili a questi ultimi, allora una *concordia discors* tra i due pensatori, uniti da una sostanziale identità di interessi sotto il profilo scientifico-descrittivo, è senz'altro possibile e altamente verosimile. Ma, quando questa stessa indagine biopsicologica si trasfonde in una riflessione antropologica e storico-culturale capace di pensare il *diverso*, quando essa verte sul ruolo degli animali nell'economia dell'universo, quando il sentimento originario di φιλία e di giustizia verso gli animali, dettato dalla αἴσθησις περὶ τὸ συγγενές vigile e operante prima dell'irruzione di “Ares e Tumulto” tra gli uomini, risulta determinante per la purezza e la *pietas* degli uomini stessi,¹¹⁸ quando questo rapporto, fondato *naturalmente* su un intrinseco

¹¹⁷ Rinvio, in proposito, ad alcuni miei contributi: “Aristotelismo e anti-aristotelismo del *De igne* teofrasteo,” *Elenchos* 5 (1984) 45–102 (cfr., in particolare, 79); “Il linguaggio scientifico in Teofrasto, con particolare riguardo al *De igne*,” in AA. VV., *Il problema del linguaggio nella filosofia greca* (Roma 1988) 91–111; “La posizione di Teofrasto tra metafisica e fisica,” *Epistemologia* 12 (1989), fasc. spec., 49–72 (cfr., in particolare, 52–53; 68 n. 8). Si vedano, in proposito, anche le osservazioni di Wieland 1993 (*supra* n. 111) 349–50 e, *ivi*, n. 41.

¹¹⁸ Non è facile, alla luce del tardivo contesto porfiriano, stabilire sino a che punto la nozione teofrastea di οἰκειότης tra gli uomini e gli animali trascenda la valenza prettamente biopsicologica ed entri in rapporto con una precisa problematica etico-religiosa (cfr. Porh. *De abst.* 2.59.1–61.2 = Fr. 8 Pötscher). Su questo aspetto della questione mi limito a rinviare alla posizione critica, ispirata a grande cautela, di Obbink 1988, 283; 293 n. 72. Condivisibile appare comunque il giudizio dello studioso: “From demonstrably Theophrastean passages we may safely say that the ideal sketched in *On Piety* was that of consistent or ‘continous’ piety (*syneches eusebeia*), and that this was regarded as dependent upon the mental disposition of the worshipper” (283).

senso di "appartenenza," sotto la spinta dell'estrema indigenza,¹¹⁹ e non già sotto quella di una natura originariamente rivolta al male, degenera fino al punto di determinare *παρανομία* e *ἀμαρτία* e si pone in aperto conflitto con la volontà che gli stessi dei fanno conoscere, allora la questione del modo in cui Teofrasto, attraverso un ideale etico radicato nell'*οἰκείον* della natura, guarda al mondo animale diventa cruciale. Né va sottovalutata, in questa ottica, la concezione teofrastea del divino¹²⁰ fondata su tradizioni e prescrizioni religiose che affondano le loro autentiche e familiari radici nei primitivi culti agrari e in pratiche che respingono ogni forma di assurde osservanze¹²¹ e che rifuggono dall'introdurre nei sacrifici quella "prodigalità" (*πολυτέλειαν*) che genera "uno sciame di mali: superstizione, lussuria e la credenza che è possibile corrompere la divinità e neutralizzare l'ingiustizia con sacrifici."¹²²

Ciò posto, non si ritiene storicamente corretto considerare di poco momento le risultanze filosofiche di una presa di distanza di questa portata, interessante la sfera del sacro e la valutazione stessa della decadenza morale nell'evoluzione culturale delle società umane. Essa infatti non può essere collocata sullo stesso piano e contesto di precedenti divergenze, né può essere giudicata isolatamente e, magari, ricondotta a un puro e semplice grado di enfasi, ma trova la sua espressione in una disposizione mentale e in presupposti dottrinali del tutto singolari, profondamente diversi da quelli aristotelici¹²³ e che nulla ci autorizza a pensare indulgano a un immaginario popolare di basso profilo concettuale.

¹¹⁹ Per la sequenza cronologica che porta l'umanità al terzo stadio del sacrificio animale cfr. Porph. *De abst.* 2.7.3 (= 584A 58ss. FHS&G); 2.27.1-7 (= 584A 276ss.).

¹²⁰ Si veda, in proposito, W. Pötscher, *Strukturprobleme der aristotelischen und theophrastischen Gottesvorstellung* (Leiden 1970) 95.

¹²¹ Cfr., e.g., *HP* 9.8.7, dove Teofrasto, mentre precisa in forma estremamente concisa che i 'tagliatori di radici' non compiono nulla di "assurdo" se innalzano preghiere mentre lavorano (*τὸ δ' ἐπευχόμενον τέμνειν οὐθὲν ἴσως ἄτοπον*), deplora e irride, senza cautela alcuna, altre pratiche largamente diffuse, definite "come arbitrarie e del tutto fittizie" (*ὥσπερ ἐπίθετα καὶ πόρρωθεν*: 9.8.6; cfr. 9.8.8), ossia non integrabili nella linea di una tradizione culturale che risponda in modo appropriato alla natura e alla cultura delle piante. Su ciò rinvio a A. M. Battagazzore 1992, 234-36.

¹²² *De abst.* 2.60.1 = 584D 9-12 FHS&G; cfr. *supra* n. 118. Per la definizione peripatetica di *εὐσέβεια*, che s'inquadra perfettamente nella visione di Teofrasto, cfr. Stob. *Anth.* 2.7.25. Si veda, in merito, Fortenbaugh 1984, 271-72.

¹²³ Si vedano, in proposito, le giuste considerazioni di Fortenbaugh 1984, 269-70; 278-79 e *passim*.

Queste considerazioni non mirano a smentire, essenzialmente, gran parte dei suggerimenti della Browning Cole nel loro valore *circostanziale*, ma costringono d'altra parte a prendere coscienza del fatto che, quando ci troviamo di fronte ad una divergenza tra discepolo e maestro, il nostro primo pensiero non dev'essere necessariamente quello di minimizzarla, cercando a ogni costo la via per riconciliarli.¹²⁴

¹²⁴ Questo tentativo è palese, come si è già rilevato (cfr. *supra* n.108), in Dierauer quando, in riferimento alla dottrina dell'οἰκειότης fatta valere da Teofrasto nel trattato *De pietate*, tende a depotenziarne il valore sostenendo che si trattava di uno scritto essoterico rivolto a un vasto pubblico, per cui "wenn Theophrast von der Verwandtschaft von Mensch und Tier sprach, so wollte er damit keine streng naturwissenschaftliche Aussage machen, sondern in erster Linie ans Gefühl appellieren." E, subito dopo, in riferimento all'inevitabile confronto con la posizione assunta da Aristotele al riguardo, lo studioso commenta che "Das gegenüber Aristoteles Neue und Umwälzende in Theophrasts Tierbetrachtung ist eigentlich weniger der Gedanke der Mensch-Tier-Verwandtschaft als vielmehr die offenbar daraus abgeleitete Behauptung, das Töten unschädlicher Tiere sei ein Unrecht." Impostando il problema in questi termini che sono arbitrariamente riduttivi perché hanno come imprescindibile ed esclusivo punto di riferimento la concettualizzazione aristotelica del problema, si perde di vista l'indipendente fondamento teorico su cui poggia la svolta operata dalla linea di pensiero teofrastea riguardo al rapporto fra l'uomo e gli altri viventi. Una linea di pensiero che, soprattutto in campo etico-politico, si pone fuori dal sistema di valori proprio della razionalità antropocentrica aristotelica.

P.S.

Per l'"indagine analitica" cui faccio riferimento a p. 258 vedasi A. M. Battagazzore, "La concezione teofrastea della ΟΙΚΕΙΟΤΗΣ e del ΔΙΚΑΙΟΝ verso gli animali alla luce di un passo contrario di Porfirio (*De abst.* 2.22.1-3)," in *ΟΛΟΙ ΣΙΖΗΙΟΣ. Le vie della ricerca. Studi in onore di F. Adorno*, ac. di S. Fringhi (Firenze 1996) 81-93.

12

Theophrastus as Philosopher and Aristotelian¹

Robert W. Sharples

I. How Independent of Aristotle was Theophrastus?

Theophrastus was Aristotle's colleague for over twenty years and his successor as head of the Lyceum. Aristotle's work provided the context for that of Theophrastus; any attempt to assess Theophrastus' achievements must inevitably consider him in relation to his older colleague. In good Aristotelian fashion, we may begin by considering two extreme views and a mean between them.

¹ This is a revised version of a paper circulated, at the request of the organisers, in advance of the Leiden Theophrastus conference. It has its origin in papers given in various places between 1988 and 1992—to the B Club at Cambridge, to the Oxford Philological Society, to the Open University London Classics seminar and as a Lunch-hour Lecture in University College London; I am grateful to all who contributed to discussion on those occasions. In the circulated version I deliberately tried to be both selective and provocative; the paper made no claim to be a complete treatment of its theme, and sought not to encroach too much on the territory of any of the speakers at the conference. In the present revision I have made additions which take account of some of the papers given at the conference itself and included in the present volume; but I have not attempted to do so comprehensively.

The first is exemplified by Boethius, who tells us that Theophrastus “touched lightly on things which he knows have been said by Aristotle earlier, but follows up more diligently other things not dealt with by Aristotle.”² There is clearly some truth in this. Theophrastus’ work on botany complemented Aristotle’s on zoology; and in fields that both studied Theophrastus attended to areas that Aristotle had not considered fully. For example, Theophrastus dealt with the part played by delivery in rhetoric, which Aristotle neglects.³ But the borderline between considering different aspects and adopting a different approach is not a hard and fast one; moreover, Boethius’ comment is made in the particular context of logic, and there, as a matter of fact, Theophrastus did not just expand on Aristotle but corrected his views on modal logic, at least in the sense that his modifications produced a system that was more internally coherent.⁴ The idea of a Theophrastus who simply added footnotes to Aristotle’s work without making any original contribution of his own can hardly be upheld; Boethius’ remark may tell us more about the arrangement of some of Theophrastus’ works than about the doctrines they contained.

At the other extreme there are those who claim that, not just in modal logic but elsewhere too, Theophrastus advanced views of his own which amount to a rejection of central Aristotelian theses. Some support for this view might indeed be found in Quintilian, who tells us that Theophrastus “is accustomed fearlessly to dissent from” Aristotle.⁵ But

² 72A FHS&G. And in modern times one may compare Eduard Zeller: “In creative power of intellect [Theophrastus] is not indeed to be compared with Aristotle. ... The fundamental principles of the system suffer no changes and are not infrequently stated in the very words of Aristotle.” (E. Zeller, *Die philosophie der Griechen* 3.2³ [Leipzig 1879] 809 and 813; cited from the English translation by B. F. C. Costelloe and J. H. Muirhead, *Aristotle and the Earlier Peripatetics* [London 1897] 351 and 355, after Allan Gotthelf, “*Historiae* I: plantarum et animalium,” in *Theophrastean Studies* [RUSCH 3], ed. W. W. Fortenbaugh and R. W. Sharples, 100–35, at 127 and n. 71 [New Brunswick, NJ 1988]). Much depends, indeed, on what counts as a change in fundamental principles—an issue to which we will constantly be drawn back in this paper.

³ Cf. W. W. Fortenbaugh, “Theophrastus on Delivery,” in *Theophrastus of Eresus: On his Life and Work* [RUSCH 2], ed. W. W. Fortenbaugh, P. M. Huby, and A. A. Long, 269–88 (New Brunswick NJ 1985); and, on Aristotle, W. W. Fortenbaugh, “Aristotle’s Platonic Attitude towards Delivery,” *Philosophy and Rhetoric* 19 (1986) 242–54.

⁴ The importance of Theophrastus’ contribution is emphasised by Mignucci in the present volume, 39–65. See also below, n. 47.

⁵ 694 FHS&G (in the context, indeed, of saying that on the particular point in question Theophrastus did follow Aristotle).

Quintilian may have expected more deference to a teacher than we would find natural.

Three examples of such interpretations may serve for the present. First, Steinmetz⁶ has argued that Theophrastus abandoned the fifth Aristotelian element, the heavenly ether; that he distinguished fire as active from the other three elements as passive; and that he modified the Aristotelian theory of dry and moist exhalations by treating the dry exhalation simply as reflection of the heat of the sun. It is of the essence of Steinmetz' re-interpretation that the new physical theory is not just indicated in programmatic statements, but can—he claims—be detected in the detail of Theophrastus' explanations of particular phenomena.

Another example is provided by the definition of place. We know that Simplicius saw a tentative statement by Theophrastus as foreshadowing Damascius' much later theory of place as position in the world as an organised whole.⁷ Sorabji has argued, on the basis of this passage, that Theophrastus deliberately rejected the theory of natural place as exercising attraction, and that it was because Theophrastus had disposed of the Aristotelian view that Hellenistic philosophers of other schools paid no attention to it. Indeed, at one point Sorabji speaks of Theophrastus as *opening the way* for other theories (my emphasis)—the suggestion being that the way was one which the authority of Aristotle would otherwise have blocked.⁸ We should distinguish here between, on the one hand, a claim that the Stoics *could not develop* their own views until Theophrastus had cast doubt on those of Aristotle—which may involve a false assumption that Aristotle's views were as important for all Hellenistic philosophers as they are for us⁹—and, on the other, the more plau-

⁶ P. Steinmetz, *Die Physik des Theophrastos von Eresos* (Bad Homburg) 1964.

⁷ 149 FHS&G.

⁸ R. Sorabji, "Theophrastus on Place," *RUSCH* 3, 139–66, at 149; id., *Matter, Space and Motion* (London 1988) 202–15, esp. 213–14: "The Stoics do not have to address themselves to the idea that place has any influence on motion, once Theophrastus has questioned the idea and Strato abandoned it", and also 158. Sorabji is perhaps more tentative in his (ed.) *Philoponus and the Rejection of Aristotelian Science* (London 1987) 16–17. Cf. also, on the criticisms of Aristotle's definition of place in 146 FHS&G, Sorabji 1988, 186–201; K. Algra, "Place in Context," in *Theophrastus: His Psychological, Doxographical and Scientific Writings* [*RUSCH* 5], ed. W. W. Fortenbaugh and D. Gutas, 141–65 (New Brunswick, NJ 1992), opposing Sorabji on the question of natural place; and Sorabji's paper, in this volume, 203–21, at 206ff. above.

⁹ An assumption which is well challenged by J. Annas, *Hellenistic Philosophy of Mind* (Berkeley 1992) 12. And cf. Long's paper in this volume, 355–83 below.

sible assertion that the absence of Stoic *attacks* on a particular Aristotelian doctrine can be explained by its having been abandoned even by Aristotle's own followers in the Lyceum.¹⁰

A third example of the interpretation of Theophrastus as rejecting Aristotelian views is the attempt of Senn to distinguish, in the first two chapters of the *Enquiry concerning Plants*, an earlier stratum which followed Aristotle in treating plants and animals alike and a later which stressed the differences between them.¹¹ Senn's theory has not generally found favour.

Intermediate between the two preceding assessments—on the one hand, Theophrastus as loyal but unoriginal follower of Aristotle, and on the other Theophrastus as introducer of revolutionary changes in the Aristotelian system—is Hans Gottschalk's interpretation of passages in Theophrastus concerned with general issues, such as the opening of the treatise *On Fire*, as raising problems concerning Aristotelian views rather than as ultimately rejecting them. Seemingly un-Aristotelian explanations of particular phenomena are to be explained, he argues, by a tension in Theophrastus' own thought between his views on general issues, which remain fundamentally Aristotelian, and his treatment of particular details, where he speculates in an *ad hoc* fashion without perhaps realising the strain that his doing so puts on the general framework.¹² Raising questions and difficulties concerning a general theory is

¹⁰ So, of the Unmoved Mover, Sorabji 205–6 above. It should further be noted (i) that there is a difference between abandoning and actually refuting, even if in an ideal philosophical world the former would only ever happen as a result of the latter; (ii) that the raising of objections, as in Theophrastus' *Metaphysics* (on which see below, n. 27) is not the same thing as a final and conclusive refutation; and (iii) that the fact that the Stoics respond to some Aristotelian arguments does not necessarily exclude their having ignored others, not because they had been abandoned, but just because they found them uninteresting. (Sorabji's statement [206 above] that "it is the way of philosophers to engage dialectically with views that are actually held" is only part of the truth: philosophers may well argue against views held in the past, or even held by no-one and invented for the sake of argument, because they find them grist to their own philosophical mills. And in any case, it does not follow that philosophers must engage with *all* views that are (still) actually held by their opponents. Here the concluding section of Long's paper in the present volume is particularly relevant. Much indeed hangs for this whole discussion on how we answer the questions "what is a philosopher?" and "how do philosophers behave?").

¹¹ G. Senn, *Die Pflanzenkunde des Theophrast von Eresos*, ed. O. Gigon (Basel 1956).

¹² H. B. Gottschalk, "The *De coloribus* and its Author," *Hermes* 92 (1964) 59–85; id., review of P. Steinmetz, *Die Physik des Theophrastos von Eresos*, in *Gnomon* 39

a thoroughly Aristotelian way of doing philosophy, and we should not assume that to question a view is necessarily to reject it.

These views of Theophrastus were all formulated by scholars before the new collection of fragments and testimonia in FHS&G became available. They rest in part on consideration of the surviving works, and in part on collections of fragments that were either less complete (Wimmer) or confined to particular areas (such as Graeser's collection of the logical material).¹³ I shall return at the end of this paper to the question posed by the conference organisers, how much difference the new collection of fragments has made. But there is a methodological consideration relating to the use of second-hand and fragmentary evidence that should be mentioned straight away. Simplicius' evidence for Theophrastus' views on place is typical of our information about many areas of Theophrastus' activity. Its context is the discussion of Aristotle's views—in this case, indeed, a commentary on his actual text. It is likely that Theophrastus' views will be mentioned in such contexts only where he disagreed with, or at least questioned, those of Aristotle himself. There are indeed exceptions, as when Simplicius is prompted, by the fact that Strato did not accept Aristotle's view of time, to note that Theophrastus did do so;¹⁴ but in the commentary tradition, at least, such cases are in the minority. There may therefore be a danger that, by highlighting cases of disagreement, some of our sources may encourage us to think of Theophrastus as more revolutionary than he actually was or intended to be. In other types of source, indeed, Theophrastus and Aristotle may be mentioned together as Peripatetics in such a way that a false impression of agreement is given; the extreme case of this is the simple assertion in Epiphanius' doxography, after a listing of alleged opinions of Aristotle that may owe more to Critolaus than to Aristotle himself, that "Theophrastus held the same opinions as Aristotle."¹⁵ One

(1967) 17–26, at 25–26. (Gottschalk does however emphasise that Theophrastus paved the way for Strato to adopt a more revolutionary approach to physics.)

¹³ A. Graeser, *Die logischen Fragmente des Theophrast* (Berlin 1973).

¹⁴ 151B FHS&G.

¹⁵ 162 FHS&G. For Critolaus as the possible source of this account cf. P. Moraux, "Diogène Laërce et le Peripatos," *Elenchos* 7 (1986) 247–94, at 282. Admittedly, Epiphanius has a deservedly appalling reputation as a source (cf. H. Diels, *Doxographi Graeci* [Berlin 1879] 175). I. G. Kidd observes with some restraint that "in general the comments of the bishop of Salamis do not inspire confidence," noting that Epiphanius attributes to Chrysippus the Stoic the view that the universal goal was to enjoy oneself (τὸ ἡδοναθεῖς: I. G. Kidd, *Posidonius*, vol. 2: *Commentary*, part ii [Cambridge 1988]

might add the many passages where Galen lists great figures of philosophical and medical tradition whom his hapless opponents either disagree with or—he claims—have not even read; the presence or absence of a particular individual, and thus of Theophrastus, from any given list often seems more a matter of chance than anything else.¹⁶ But such “evidence” is easily discounted, even though the principles adopted in FHS&G entail its inclusion, for the record, as it were; it is the statements that indicate differences between Theophrastus and Aristotle that may distort our overall picture, just because of their trustworthiness as far as their own particular context is concerned.

II. What is Aristotelian Anyway?

Assessment of Theophrastus, and of Theophrastus’ relation to Aristotle, cannot be separated from that of developments in post-Aristotelian philosophy in general, and of subsequent developments in the Peripatetic school in particular. Theophrastus has often been seen as paving the way to an increased materialism and mechanism which reached its culmination, in the Peripatetic school at least, in his successor Strato. Those who find these tendencies uncongenial and un-Aristotelian—or un-Aristotelian because uncongenial?—can see and have seen this as an explanation of the subsequent decline of the school.¹⁷ Others have seen Theophrastus and Strato as introducing a welcome empiricism in place of Aristotle’s anti-scientific appeal to intuition;¹⁸ but this probably rests on a misinterpretation of Aristotle.¹⁹

Theophrastus in his *Metaphysics* certainly challenges the claim that all natural phenomena can be explained in teleological terms; but, as Most has pointed out, some—but only some—of the explanations that

642). Conybeare remarked that “if such a writer ever told the truth, at least of his enemies, it must have been by accident.” (F. C. Conybeare, *Philo about the Contemplative Life* [Oxford 1895] 320, cited by D. T. Runia, *Philo in Early Christian Literature* [Assen 1993] 228).

¹⁶ Cf. J. Bertier, *Mnésithée et Dieuchès* (Leiden 1972) 6–7; R. W. Sharples, “Theophrastus on Tastes and Smells,” in *RUSCH* 2, 183–204, at 187–88; R. J. Hankinson, *Galen On the Therapeutic Method, books 1 and 2* (Oxford 1991) 89.

¹⁷ E.g. C. O. Brink, “Peripatos,” *RE*, Suppl. VII (1940) 899–949, at 948.

¹⁸ Recently: M. Isnardi Parente, *Filosofia e scienza nel pensiero ellenistico* (Naples 1991) 125–28, and G. Marengi, *[Aristotele]: Profumi e miasmi* (Napoli 1991) 9–11, 33–36.

¹⁹ Cf. J. Barnes, *Aristotle’s Posterior Analytics* (Oxford 1975) 256–57 (= ²1994, 268).

he there rejects are ones that Aristotle rejects too, and this is best explained if we suppose that Theophrastus' remarks are not criticism of Aristotle but rather a reflection of the discussions from which Aristotle's own views emerged.²⁰ We should not suppose that Theophrastus' works are always later than Aristotle's and have Aristotle's as their primary concern.²¹ Theophrastus was indeed Aristotle's junior, but by only thirteen years.

A central theme of Theophrastus' *Metaphysics* is that the same degree of organisation should not be expected at every level of the cosmos;²² that is a recurrent theme in Peripatetic thought from Aristotle, *Metaphysics* A 10²³ to the pseudo-Aristotelian *De mundo*²⁴ and Alexander of Aphrodisias, who used it to defend the unity of the Aristotelian universe not only against possible Stoic charges²⁵ but also against actual Platonist ones.²⁶ It is true that Theophrastus seems to have rejected Aristotle's

²⁰ G. W. Most in A. Laks, G. W. Most and E. Rudolph, "Four Notes on Theophrastus' *Metaphysics*," *RUSCH* 3, 224–33. But cf. J. G. Lennox, "Theophrastus on the Limits of Teleology," *RUSCH* 2, 143–64.

²¹ That Theophrastus' *Metaphysics* is early (but later than Aristotle, *Metaphysics* A) is argued by D. T. Devereux, "The Relationship between Theophrastus' *Metaphysics* and Aristotle's *Metaphysics* A," *RUSCH* 3, 167–88.

²² Theophrastus, *Metaphysics* 6a 2, 8a 3, 8a 27. Cf. A. Laks (above, n. 20) 237ff.

²³ 1075a18–25. It is true that accounts may differ over how far, in a universe with differing degrees of organisation at different levels, those levels are interconnected. (I am grateful to David Furley for emphasising to me the need to be precise on this point.) Certainly, for Aristotle, the universe must not be seen as "episodic" (1076a1). One might also compare Aristotle, *De Cael.* 2.12, on which cf. my "Responsibility and the Possibility of More than One Course of Action: A Note on Aristotle, *De caelo* 2.12," *BICS* 23 (1976) 69–72.

²⁴ [Aristotle], *De Mundo* ch. 6.

²⁵ Alexander, *De Fato* 25. I say "possible" because the real direction of the argument is the reverse: Alexander is attacking the Stoics, and formulating an Aristotelian reply to the counter-objection they might raise in self-defence.

²⁶ Cf. Atticus, Fr. 3 Des Places; Alexander, *Quaestio* 2.21; and P. Merlan, "Zwei Untersuchungen zu Alexander von Aphrodisias," *Philologus* 113 (1969) 85–91. Marlein van Raalte has argued ("The Idea of the Cosmos as an Organic Whole in Theophrastus' *Metaphysics*," *RUSCH* 3, 189–215) that Theophrastus regarded the universe as an organism; if so, it was I think one with a hierarchical organisation. And while there may be no positive evidence for Strato having shown interest in such ideas (van Raalte, op. cit., 203), I do not think we can be sure that he repudiated them either, given the tendentious nature of the evidence. Plutarch says that Strato denied that the universe was a living organism (Strato, Fr. 35 Wehrli; van Raalte, loc. cit.); but neither Aristotle nor Theophrastus held that it actually was one, and cf. below, n. 32. It is however interesting that Strato is the only Peripatetic apart from Aristotle to be the subject of an individual account in the passage from Epiphanius cited in n. 15 above.

Unmoved Mover; his *Metaphysics*, being aporetic, cannot perhaps provide conclusive evidence on this,²⁷ but Proclus tells us the same story, if indeed he was not himself just interpreting Theophrastus' *Metaphysics* dogmatically.²⁸ But far from seeing a difference here between Theophrastus and Aristotle, Proclus presents Theophrastus as *typical* of the Peripatetics—as indeed he is, from Proclus' Neoplatonist perspective. Even acceptance of the Unmoved Mover would hardly provide the sort of metaphysical principles Proclus himself wants.

Aristotle did not himself believe in an Unmoved Mover of the heavens throughout his career; and whether the movement of the heavens is an essential part of their being, and if so whether it requires explanation, is a theme that concerned not just Theophrastus but students of Aristotle in later antiquity.²⁹ Theophrastus certainly seems to have believed that the heavens were ensouled and divine³⁰—a view which modern critics have wrongly denounced as un-Aristotelian when later advanced by Alexander of Aphrodisias.³¹

It is not indeed always uncontroversial just what is to count as Aristotelian anyway. Repici has shown how tendentious is the evidence on which modern assessments of Theophrastus' successor Strato have been based; Plutarch, writing as a Platonist, and Cicero's Epicurean spokesman, seeking to emphasise internal disputes within other schools, may not be the best guides as to whether Strato is or is not a loyal Aristotelian, and in denying conscious purpose in nature Strato was arguably doing no more than Aristotle himself does in *Physics* 2.³² Modern critics, no less than ancient ones, have been influenced by their own assess-

²⁷ On the dangers of interpreting Theophrastus' *Metaphysics* dogmatically cf. J. Ellis, "The Aporetic Character of Theophrastus' *Metaphysics*," *RUSCH* 3, 216–23; G. Reale, tr. J. R. Catan, *The Concept of First Philosophy and the Unity of the Metaphysics of Aristotle* (Albany, NY 1980) 392–423.

²⁸ 159 FHS&G. Laks, in his paper in the present volume, says that this is not from Theophrastus' *Metaphysics*.

²⁹ Cf. P. Merlan, "Plotinus, *Enneads* 2.2," *TAPA* 74 (1943) 179–91; R. W. Sharples, "The Unmoved Mover and the Motion of the Heavens in Alexander of Aphrodisias," *Apeiron* 17 (1983) 62–66.

³⁰ 159 FHS&G; cf., tentatively like everything else in the work, Theophrastus *Metaph.* 5a28–b10, 6a5–15, and 252 FHS&G.

³¹ E. Zeller, *Die Philosophie der Griechen*, etc., III.1⁴ (Leipzig 1903) 827f. n. 5. But cf. e.g. W. K. C. Guthrie, introduction to the Loeb *Aristotle: On the Heavens* (London and Cambridge, Mass. 1939) xxix–xxxvi.

³² Strato, Fr. 32, 33, 35 Wehrli; L. Repici, *La natura e l'anima: saggi su Stratone di Lampasaco* (Torino 1988) 119–56.

ment of what is central in Aristotelianism; it is particularly those who favour a Platonising reading of Aristotle who have attacked Theophrastus and Strato for neglecting the elements which they themselves regard as important. Aquinas might be surprised at Barnes' devoting only two pages of an 88-page account of Aristotle to theology;³³ but it is not clear that Aquinas' assessment is right and Barnes' wrong. Theophrastus and Strato might have found Barnes' Aristotle a more familiar figure than Aquinas'.³⁴

III. Selective Aristotelianism?

I do not mean to deny that the concerns of Theophrastus and Strato were selective. A thinker can differ from a predecessor by omission as well as by overt disagreement; though the former may be unconscious where the latter cannot be. Longrigg has argued that even the modifications of physical theory claimed by Steinmetz are developments of

³³ J. Barnes, *Aristotle* (Oxford 1982) 63–65. My point relates not to Barnes' judgement of Aristotle's theology—on which see Sorabji's paper in the present volume—but simply to the relative amount of space he gives to it. This is, I believe, significant, not only in regard to Barnes' treatment but also in Aristotle's own writing. Sorabji's statement that "God (. . .) plays a central role in the strategy of [Aristotle's] philosophy" (205 above) is open to question, not least in that we may ask in what sense Aristotle's philosophy has a single strategy. That un-Aristotelian preoccupation with theology as a central concern has misled medieval and modern interpreters is argued by Helen S. Lang in connection both with the *Physics* and (more decisively, in my view) with *Metaphysics* Λ, respectively in her *Aristotle's Physics and Its Medieval Varieties* (Albany, NY 1992), and "The Structure and Subject of *Metaphysics* Λ," *Phronesis* 38 (1993) 257–80.

The perspective adopted by L. P. Gerson, "Plotinus and the Rejection of Aristotelian *Metaphysics*," in *Aristotle in Late Antiquity*, ed. L. P. Schrenk, 3–21 at 3 (Washington DC 1994), is striking; he states that "Even Aristotle's formidable disciple and colleague Theophrastus, who himself actually composed a treatise on metaphysics, seems to write with remarkably limited understanding of the work of his predecessor in this area." See further below, n. 36.

³⁴ It may be that the significant issue for the history and decline of the Lyceum is not teleology and materialism at all, but rather the tension between the theoretical and practical lives (on which Theophrastus disagreed with Dicaearchus: 481 FHS&G). Mejer and Gottschalk, in their papers in the present volume, highlight the emphasis on theory and scholarship in the lives of Theophrastus and Eudemus respectively; Lyco took the opposite path. But to emphasize the tension between detached scholarship and political involvement, rather than that between teleology and materialism, may simply be to read the intellectual history of the third century B.C. in the light of the academic preoccupations of the late twentieth century A.D. rather than of those of the late nineteenth.

ideas already present in Aristotle's own physiological and biological writings, though not in his general physical theory.³⁵ Certainly Theophrastus, and after him Strato, seem to have neglected one central area of Aristotle's thought, that which we call "metaphysics" (though the term was unknown to the early Peripatetics themselves)—metaphysics not in the sense of the "theology" that is concerned with immaterial forms, the Unmoved Mover or Movers, but in that concerned with the being qua being of perceptible things, with the relation between form and matter and with the problem of universals.³⁶

Here again, though, it is from the perspective of later philosophical developments that Theophrastus' approach seems lacking. One of the major questions in the history of all philosophy is why Aristotle's *Categories* became a work of fundamental importance from the time of Andronicus onwards, with all the immense influence that it therefore had.³⁷ And to speak of developments in later philosophy prompts a further question; if we are to assess the contribution of Theophrastus not just as an Aristotelian but as a philosopher, what criteria are we to use?

IV. Theophrastus as Aristotle's Philosophical Heir

Even if Theophrastus' continuation of Aristotelian themes was selective, his general range of interests was hardly narrow—and here at least the contribution of the new collection of fragments in making this clear to us can hardly be in doubt. Theophrastus tells us, after all, about everything from condensation in bathrooms³⁸ to penalties for withdrawing from an agreed property deal,³⁹ from the demands made by audiences on

³⁵ J. Longrigg, "Elementary Physics in the Lyceum and Stoa," *Isis* 66 (1975) 211–29, at 216–21; id., *Greek Rational Medicine: Philosophy and Medicine from Alcmaeon to the Alexandrians* (London 1993) 158–59.

³⁶ Cf. H. B. Gottschalk, "Strato of Lampsacus: Some Texts," *Proceedings of the Leeds Philosophical and Literary Society*, Literary and Historical Section, 11.6 (1965) 95–182, at 150; Brink 1940, 916; Gerson 1994. Gerson indeed sees the lack of interest in general metaphysics as following from the abandoning of the Unmoved Mover, the very existence of metaphysics as a subject distinct from physics depending on the existence of separate, non-physical substance (*Met.* 1026a27–29).

³⁷ H. B. Gottschalk, "Aristotelian Philosophy in the Roman World", in *ANRW* II.36.2, ed. H. Temporini and W. Haase, 1079–1174, at 1102f. (Berlin 1987).

³⁸ 211B FHS&G.

³⁹ 650 FHS&G.

lecturers⁴⁰ to the husband who has to check his wife has locked the door even after they're in bed and she tells him she has.⁴¹

But, it might be retorted with some justice, this has little to do with Theophrastus' claims to be significant as a *philosopher*. It might rather suggest that he belongs at the start of the tradition of encyclopaedia-writers; perhaps it is Pliny the Elder or Vincent of Beauvais who are his spiritual heirs, rather than Philoponus or Aquinas? (Theophrastus is cited by name in Pliny 51 times, excluding Pliny's own list of sources where Theophrastus is mentioned among the sources for three-quarters of the 36 following books. *All* these references were omitted in Wimmer's collection.)

Well, hardly. There is far more sophisticated analysis of theoretical issues in Theophrastus' *Plant Explanations* than in Pliny the Elder. Still, there is a case for attributing the decline of the Hellenistic Lyceum to its pursuit of particular sciences rather than of philosophy in general, at a time when those sciences were—to various degrees—achieving their independence from philosophy;⁴² and the beginning of the emphasis on particular sciences can be traced to Theophrastus himself. Some indeed have seen this as the central fact about him; for example John Keaney, who says in his *Oxford Classical Dictionary*² article that Theophrastus was “a scientific researcher and scholar rather than a speculative philosopher ... His occasional disagreements [with Aristotle] on points of doctrine ... or fact are due to his emphasis on science and empirical ob-

⁴⁰ τὸ δ' ἀναβάλλεσθαι πάντα καὶ ἀμελεῖν οὐκέτι φέρουσιν αἱ ἡλικίαι: Theophrastus in a letter to Phantias, cited by Diogenes Laertius 5.37 (1.20–21 FHS&G). I interpret αἱ ἡλικίαι as ‘the present generation’ rather than ‘my old age,’ against Mejer in the present volume (21 with n. 63), and with Sollenberger (M. G. Sollenberger, “The Lives of the Peripatetics: An Analysis of the Contents and Structure of Diogenes Laertius’ book 5,” in *ANRW* II.36.6, ed. W. Haase and H. Temporini, 3874 [Berlin 1992]); the plural seems odd if the reference is to Theophrastus’ own age. But against Sollenberger I think Theophrastus is complaining, not that critical audiences force him unwillingly to postpone publication and take more care over it, but rather that impatient colleagues will not allow him to put off the chores of arranging his material in definitive form when he would much rather pursue his researches with his notes in a provisional state. Sollenberger’s Theophrastus wants to “publish,” and does not like critics who cause delays; mine, like Mejer’s, wants to have time for further thought and resents the “pressure to publish,” though we differ on the source of the pressure. (However, I am conscious I may be importing an anachronism here.)

⁴¹ Theophrastus, *Char.* 18.5.

⁴² So Brink 1940.

ervation.” And since no-one would doubt that *Aristotle* was a speculative philosopher as well as a scientific researcher, our estimate of Theophrastus as an Aristotelian and our estimate of him as a philosopher turn out, from one point of view at least, to amount to the same question: if we want to assess an individual’s contribution to philosophy proper, what are we to look for? What is involved in being a philosopher?

The decline of the Lyceum may perhaps be traced in part to its falling between two stools, able to offer neither a dogmatic philosophy that could rival Epicureanism or Stoicism, nor yet the thorough-going scepticism of the Academy under Arcesilaus; John Glucker and Tony Long, in their papers in this volume, show how Aristotle’s school was the exception to the norm in the history of philosophy at Athens, and failed to provide what the Athenians wanted from philosophy. Aristotelian philosophy, based on interpreting the way people think rather than changing it,⁴³ lacked the appeal of its more radical rivals.⁴⁴ But the Lyceum’s pursuit of *enquiry*, rather than of dogmatism or of scepticism (in the acquired, rather than the etymological sense of the latter term),⁴⁵ was arguably faithful to the legacy of Aristotle, who does philosophy by raising difficulties and attempting to solve them.

It is true that all philosophical writing not only results from discussion and debate, with oneself or with others, but also expects and provokes further argument; the question is perhaps how much and within what limits, and this brings us back to the issue of where the distinction is to be drawn between critical debate within a particular tradition and a challenge to that tradition itself. The greatest change in the interpretation of Plato in the past twenty years, in the Anglo-American tradition at least,

⁴³ This is indeed a gross over-simplification; Aristotle may appeal to the opinions of the many and the wise (*Nicomachean Ethics* 1.8, 1098b27, 10.2, 1172b36–1173a2; cf. 7.1, 1145b2–7), but he does not simply reproduce everyday opinions; and the Stoics and Epicureans both based arguments on the consensus of all mankind, while claiming that popular opinion was only correct up to a certain point. In other words, the distinction is one of degree rather than kind. But it still contains a certain truth.

⁴⁴ Paradoxically enough, Gottschalk has shown that the appeal of the Peripatetic ethical position in the early Roman Empire was linked precisely with its being *less* radical than the Stoic (1987, at 1172). There is another paradox—but only an apparent one, I think—in the fact that it was Lyco, the Peripatetic who was interested only in “popular culture,” who hastened the decline of the school.

⁴⁵ “Sceptics” literally being “enquirers,” but in practice those whose enquiry leads them to suspension of judgement: cf. Sextus Empiricus, *Outlines of Pyrrhonism* 1.3 with 1.12.

has been renewed emphasis on the significance of dialogue form as an indication against dogmatism. We do not, and perhaps cannot, know how far Aristotle expected his own assertions to be questioned and challenged by others following his own example; he *might* have supposed that he had himself solved all the main problems, so that all that was left to do was to sort out the details.⁴⁶ And Theophrastus might have been enough in his teacher's shadow to leave such a claim unquestioned and to see his own role as essentially ancillary. But even if Theophrastus saw matters thus—and we do not know that he did—we still need not accept as the whole story his own estimate of the significance of what he was doing. After all, Barnes has shown how Theophrastus may have paved the way for Chrysippus' discovery of propositional logic as a distinct system, without fully realising its significance.⁴⁷

What I want to suggest is that both the question of Theophrastus' Aristotelianism, and that of his philosophical importance, can best be approached not in terms of whether or not Theophrastus agrees with Aristotle on particular points of doctrine, but in terms of a more fundamental way in which Theophrastus carries on Aristotle's philosophy; he does so just because he continues to ask questions and raise difficulties. That, surely, is precisely what a philosopher ought to be doing. Ironically enough, while the Epicureans and Stoics have now escaped from the tendency of earlier scholarship, in England at least, to see Greek philosophy after Aristotle as decadent, Aristotle's successors in his own school seem to be the last to emerge from this shadow. Or perhaps it is not so surprising; those who esteem Aristotle highly may be peculiarly aware of the real or supposed shortcomings of his successors in his own school.

Any who are inclined to think Theophrastus uninteresting because he did not develop a striking new philosophical theory of his own—because there is no such thing as 'Theophrasteism'—may be applying harsher standards to their ancient predecessor than they would apply to

⁴⁶ *Metaphysics* A7, 988a20–22 could be taken as suggesting that Aristotle had achieved a definitive statement of the principles; and Sorabji has pointed out that Aristotle—at least in *Metaphysics* Λ, and at least for God—seems to regard the contemplation of truth as superior in point of happiness to the achieving of it (R. Sorabji, *Time, Creation and the Continuum* [London 1983] 148–49, citing *Nicomachean Ethics* 10.7, 1177a26–27).

⁴⁷ J. Barnes, "Theophrastus and Hypothetical Syllogistic," *RUSCH* 2, 125–42. For a more negative judgement, however, see Long's paper in the present volume, 381–82.

themselves. Perhaps indeed the very similarity between what Theophrastus was doing and what most of us are doing—though in fewer fields—is one of the things that makes it hard for us to appreciate him. By focussing attention on Theophrastus the new collection of fragments turns out to have prompted discussions of what philosophy was and might be, both now and in antiquity.

It is true that our evidence for large areas of Theophrastus' thought tells us more about his views than about his arguments for them. Nevertheless, it is clear, from the fragments of his *Physics* and of his writings on psychology and the passions, for example, that he did carry further discussion and argument concerning many of the topics discussed by Aristotle. True, this sometimes led him to treat subjects in a more empirical way and less in terms of abstract theory;⁴⁸ but it did not always do so, and the new collection of fragments makes it clear, even if from evidence which is more compressed and obscure than we might wish, that there was plenty of what we nowadays recognize as philosophy in Theophrastus as well as much else besides.

In pursuing Aristotle's enquiries Theophrastus was carrying forward the enterprise in which they had been colleagues. The advancement of understanding, in philosophy, in natural science or in the interpretation of texts, depends on collaboration as well as on competition. Both Project Theophrastus in general, and the Leiden conference in particular, have furnished ample evidence of this.

⁴⁸ For instance in the case of rhetoric: see above, n. 3. And for a tension between "Platonic" and non-Platonic tendencies in Aristotle's ethics, with Theophrastus as the heir of the latter, cf. W. W. Fortenbaugh, "Aristotle: Animals, Emotion and Moral Virtue," *Arethusa* 4 (1971) 137–65.

13

Theophrastus and the Peripatos

Hans B. Gottschalk

The object of this paper is to examine Theophrastus' relation to other thinkers, including those of his own school. This is a legitimate approach to the problem of determining his philosophical position. Theophrastus was not one of the world's great creative thinkers, but his career occupies a central place in the history of Greek philosophy. He was a student at the Academy during the last years of Plato's life, a close friend and associate of Aristotle throughout most of his life, and must at least have known of the work of Epicurus and Zeno (the Stoic). He was also acquainted with the work of specialists in various sciences, especially the biological ones. His interaction (or, in some cases, the absence of any tangible interaction) with all these thinkers is bound to tell us something about Theophrastus himself and the view his contemporaries had of him.

However, Theophrastus' relation to the Peripatos is very different from that with other schools or individual thinkers: in a very real sense, Theophrastus was the Peripatos. It was he who established it as a school with its own campus and administrative structure, and for some thirty years he was its chief teacher and administrator, the guardian of its intellectual heritage and its most productive philosopher and writer; and he is the only one of its members from whom a substantial body of writings

has survived. Thus my task is a complex one, and I shall divide my paper into four sections, on Theophrastus and the Peripatos as an institution, Theophrastus and Aristotle, Theophrastus and his contemporaries in the school, and Theophrastus and his successors. The first three concern aspects of Theophrastus' work, all of which must be taken into account for a complete assessment of his achievement; the last will say something about the way in which his work was received and perpetuated. There will be some overlap between the sections, but I shall keep repetition to a minimum.

I

When Aristotle died, he was a refugee from the anti-Macedonian backlash in Athens which followed the death of Alexander the Great. His life's work appeared to have come to an abrupt end. His will is the will of a private individual, making detailed provisions for his immediate and extended family, but containing no mention of his school or the books and teaching materials which we know he owned during his lifetime.¹ Evidently he did not expect that anyone would try to propagate his ideas systematically, let alone found a school for this purpose. Yet this is what Theophrastus did when the political situation cooled, helped and encouraged by Demetrius of Phalerum when he became governor of Athens in the Macedonian interest. Theophrastus' position cannot have been easy. Athens was torn by internal dissension and constantly threatened by the forces of the successor-kingdoms of Alexander. The precariousness of his situation was shown by a prosecution for impiety brought against him by a certain Hagnonides, presumably before Demetrius came to power. It failed miserably, but after Demetrius' expulsion (in 307 BC) the renewed backlash led to a more serious attack on the philosophers: a law was passed forbidding anyone to open a school of philosophy without a government licence. As a result, we are told, all the philosophers left Athens and only returned when the law was repealed a year later.² This event marks a turning-point in the relations between the

¹ See Gottschalk 1972, 317f.

² The chief authority for the events narrated in this paragraph is Diogenes Laertius 5.37ff.; other references to the law of Sophocles of Sunium have been collected by Natali (1981) 149ff. Cf. Wilamowitz 1881, 194f., 170ff. = Natali 1981, 32ff., 37ff.; Ferguson 1911, 104ff.; Derenne 1930, 213ff.; Boyancé 1937, 315.

philosophical schools and Athens. Since Diogenes tells the story in the course of his *Life of Theophrastus* (5.38), it has generally been treated as a personal attack on him; but it seems to have been something more, an attempt to regulate the schools, much as the more important religious cults had long been regulated. In view of their size and political influence, this move was quite legitimate, and its failure is more a sign of the comparative weakness of the Athenian state than of any devotion to abstract ideals of academic or religious freedom. From this time, the philosophers were a separate estate.

Theophrastus' personal standing can only have been enhanced by this outcome, and we hear of no more conflicts with the city or its government. On the contrary, Diogenes emphasises the high esteem in which he was held (5.37, 41). The school also prospered. Theophrastus is said to have had two thousand students, implying an entry of about sixty a year if it is averaged over his scholarchate, and rather more in some years if we allow for the years in which the school's activity was disrupted by war or political disorder. (To put these figures into perspective, admissions to Trinity College, Cambridge, averaged 54 a year in 1546–1625, declined to a low of 21 in the decade 1760–69, and then began to rise again; they averaged 64 in 1800–9, 92 in 1810–19, and over 100 in subsequent years.)³ When he died, the school had a viable organisation and good buildings and equipment. There were problems; some of the buildings needed repair, perhaps as a result of the siege of Athens by Demetrius the son of Antigonos (later known as Poliorcetes) in 296/4, and Theophrastus had suffered financial losses through the bad luck or incompetence of his financial adviser Hipparchus. But the gloomy picture of its condition drawn by Wilamowitz and others is much exaggerated.⁴ The Peripatos was well established and respected, and no-one doubted that its future was secure. Theophrastus deserves to rank with the great Vice-Chancellors and College Presidents who are revered as founders by the institutions to which most of us belong.

³ These figures are taken from Trevelyan 1943, 86f. One might also compare the numbers for the ephebate at Athens in the Hellenistic period, when membership was voluntary. Here our information is patchy, but the figures we have for the third century BC range from 33 in 269/68 to 23 in 244/43 (see Marrou 1956, 107 and 383f.).

⁴ The evidence comes from Theophrastus' will, *ap.* DL 5.51, 56f. Cf. von Wilamowitz 1881, 267 n. 4, Jaeger 1938, 73f., Gottschalk 1972, 320 n. 5 (= Natali 135 n. 26).

II

Several ancient testimonia purport to tell us something about Theophrastus' approach to Aristotle's work. One has been preserved by Boethius (*In Int.* ed. 2 p. 11.30ff. Meiser), who took it from Alexander of Aphrodisias. Others are in Boethius *De Syll. Cat.* 815A, Themistius *In De An.* p. 107f. and Priscian's *Metaphrasis*. All emphasise the closeness of Theophrastus' teaching to Aristotle's, but while Themistius and Priscian suggest that Theophrastus raised difficulties (*aporiai*) about some of Aristotle's doctrines, but did not explicitly abandon them or put anything different in their place, Alexander and Boethius acknowledge that he was prepared to make suggestions of his own in order to fill real or apparent gaps in Aristotle's work. What none of them will admit is that Theophrastus was prepared to contradict Aristotle (or at least the writings of Aristotle which they and we know), although Alexander is one of our most important sources for such innovations. One reason for this may be that they were commentators on Aristotle who assumed, perhaps without being fully aware of it, that Theophrastus was doing much the same thing as they themselves; Quintilian, who stood outside the scholastic tradition, says quite plainly that Theophrastus *dissentire ab eo* (sc. *praeceptore suo*) *non timide solet* (3.8.62 = 694 FHS&G). But Theophrastus' reputation as the faithful follower and exponent of Aristotle's philosophy goes back to the Hellenistic era. Cicero and other writers dependent on Hellenistic sources regularly cite them together as representatives of the original Peripatos.

The fact of the matter is that Theophrastus did not adopt the same approach in all his works. It is probably safe to say that he always began where Aristotle left off, but after that we must differentiate, and I shall begin with what is most obvious. There are some subjects which Theophrastus made entirely his own, including botany, metallurgy and mineralogy. Aristotle had included these in the syllabus of his natural philosophy but did little or no detailed work on them,⁵ and Theophrastus' researches superseded whatever Aristotle may have done. It is often said that Aristotle encouraged Theophrastus to take up these fields and there may be some truth in this, but presumably this was not the only reason for his choice of subject-matter; it may not be fanciful to suggest that his interest in petrification, on which he wrote a treatise

⁵ E.g. *Meteor.* 378a17ff., with Alexander ad loc.

tise in two books, was stimulated by the fact that there is a petrified forest less than a two hours' walk from his birthplace. In cases like this there was little possibility of direct disagreement, and what there was concerned details. To illustrate, let me take a case already discussed by O. Regenbogen: at *CP* 2.17.5 Theophrastus says that mistletoe is generated from seed deposited on trees in birds' faeces, not spontaneously, as Aristotle believed.⁶ Note that Theophrastus does not deny the possibility of spontaneous generation as such, only that mistletoe is produced in this way.

At the other extreme are two areas in which we have a fairly comprehensive set of *aporiai*, but few or no positive suggestions and no conclusive evidence of a change of doctrine: what Aristotle called "First Philosophy," and the doctrine of the "active reason" discussed in the second book of Theophrastus' *De anima*.⁷ Nothing in these texts seems to me to commit Theophrastus to rejecting any of the Aristotelian doctrines he questions. It has of course been claimed, on the strength, mainly, of a passage in Proclus, that Theophrastus abandoned the doctrine of the Unmoved Mover, but even this seems to me to be open to a different interpretation.⁸ Theophrastus appears to have gone as far as he could with raising questions, but then to have stepped back from the brink. We have a similar, but shorter, set of *aporiai* concerning place, but here we are told that it was Strato who took the final step.⁹

Genuine philosophical innovations must be looked for in those areas about which both Aristotle and Theophrastus wrote *pragmateiai*,

⁶ Regenbogen 1937 = 1961 276–85; Arist. *GA* 715b30. Another, perhaps more fundamental, difference might appear to be that Theophrastus recognised sexual differentiation in trees (*CP* 1.22.1, *HP* 3.8ff. and elsewhere; cf. Repici Cambiano 1985, 371 n. 6). But on this point Theophrastus followed popular beliefs (of foresters, etc.) and his distinction of "male" and "female" trees is based on differences of fertility and on secondary sexual characteristics such as smell or taste or the smoothness of the wood or bark. He does not say that the mechanism of producing seed is a sexual one, i.e. that pollination is a form of sexual impregnation. In other, more fundamental ways Theophrastus' botany was modelled on Aristotle's zoology, as Wöhrle (1985) and Repici Cambiano (1985) have shown. To adapt James Lennox' words (1985, 154), the differences between them are the differences between one biologist and another.

⁷ *Ap.* Themistius l.c. and Priscian, *Met.* 25ff. B. For recent work on Theophrastus' attitude to teleology, see the bibliography in Van Raalte (1993), especially the articles of Lennox 1985 and Repici Cambiano 1985.

⁸ Proclus *In Tim.* 35A, 2.120ff. Diehl = 159 FHS&G; cf. Sorabji (above 204–5), Sharples (1985) and below, 287f. and 292.

⁹ Theophrastus 146–49 FHS&G, Strato Fr. 59 W.

chiefly in logic and natural philosophy. The differences between their logical doctrines are thrown into particular relief by the fact that Theophrastus' most important works in this field, the *Peri kataphaseôs kai apophaseôs* and the *Prior Analytics*, mirrored the content and arrangement of Aristotle's *De interpretatione* and *Prior Analytics*. Some of Theophrastus' innovations were quite far-reaching: the acceptance of the indirect modes of the first figure (and possibly some others) as independent syllogisms and the development of a theory of hypothetical syllogisms; in modal logic, the adoption of the one-valued definition of possibility and of the *in peiorem* rule for modal syllogisms.¹⁰ Unfortunately we are not told his reasons for making them. Others are more technical and less obvious, but perhaps even more revealing, e.g. his use of a new argument, more intuitive than Aristotle's, to establish the convertibility of universal negative sentences (90 FHS&G). But some of them were anticipated, at least in part, in Aristotle's writings, and none breach the foundations of his theory. Many are ascribed to Theophrastus and Eudemus jointly and may be the outcome of debates within the school; indeed, Bochenski has suggested that they may have been inspired by Aristotle himself in oral discussions after his extant books were written.¹¹

In natural philosophy, Theophrastus introduced one innovation which Aristotle certainly would not have countenanced: a theory of microvoid which anticipated Strato's, although it does not seem to have been worked out as fully.¹² This is a major change which might appear to threaten Aristotle's doctrine of matter, but neither Theophrastus nor Strato seems to have felt this, perhaps because they treated the microvoids as simply a part of the homoeomerous bodies to which they belong. It was used to explain, among other things, the interpenetration of bodies which Theophrastus apparently regarded as a necessary precondition for qualitative change (*Ign.* 42, 61). He did not deny that the most important factor in such a process was that the agent and patient must be dynamically compatible, i.e. there must be an agent capable of acting on the patient, and a patient capable of being acted on by the agent;¹³ but whereas Aristotle held that surface contact between them

¹⁰ FHS&G 91, 111–13, 102, 106.

¹¹ Bochenski 1947, 125; cf. 288 below.

¹² Cf. Gottschalk 1961, 72ff.; 1964, 80ff.

¹³ Cf. Gottschalk 1961, 73.

was enough to cause it to take place (*GC* 1.9), Theophrastus felt that something more was needed. Even so, the magnitude of the change made to Aristotle's system may seem disproportionate to the importance of the problem it was intended to solve; however, Theophrastus' attention was centred on the description and explanation of actual phenomena more than the construction of over-arching theories. At *Vent.* 15 he says himself that no single cause is sufficient to explain all winds; each is the result of many factors, all of which must be taken into account if we want to explain why this wind is blowing here and now. This entailed a considerable modification of Aristotle's theory based on the "warm exhalation" and the revolution of the heavens, but the same methodological principle was stated and applied by Aristotle.¹⁴

To sum up, the traditional view of Theophrastus is broadly correct. His work was a continuation and development of Aristotle's. The questions he asked, however interesting and apposite they may seem to us, were never pressed to the point of presenting a serious challenge to Aristotle's teaching; the changes he proposed never constituted a dangerous threat. We may find this disappointing, but it would be more constructive to ask why Theophrastus exercised so much restraint; after all, we have Strato to show us what he might have done (Steinmetz reconstructed his system in a way which brought it very close to the one most of us would ascribe to Strato, but his views have been refuted pretty thoroughly).¹⁵ One part of the explanation must be that he was not equally interested in all areas of philosophy. It has been pointed out that he showed less interest in ethics than physics or logic,¹⁶ but what he was least interested in seems to have been metaphysics, both general and special. If he had to choose between an abstract concept like the continuity of matter and a plausible explanation of a set of phenomena, the phenomena would win every time; in many areas of knowledge, including some of those he had made particularly his own, teleological principles were difficult to apply, and proximate causes were more important to him than remote ones¹⁷ (this, I suspect, is what lies behind his

¹⁴ *GA* 787a10ff., cf. 725b26ff.; see further 293 below. The same principle is regularly applied in Theophrastus' botany; cf. Repici Cambiano 1985, 368.

¹⁵ Steinmetz 1964, 158ff.; cf. Gottschalk 1967, 22ff., Longrigg 1975, 219ff., Sharples 1985.

¹⁶ A. A. Long, 369 below.

¹⁷ Cf. Battagazzore 1984, 50. Similar tendencies can be observed in some of Aristotle's works; see Steinmetz (1969 233f.) on the differences between his account

criticism of Plato's *psychogonia* in 159 FHS&G). In this respect he already belonged to the Hellenistic era.

Nevertheless, he needed a frame of reference for his explanations, and Aristotle's was the one he had. This was not something he had found in a book; he had known it from its inception, seen it grow and develop and, in some respects, change.¹⁸ In a sense, it was his system as well as Aristotle's. He will have discussed many of the issues with Aristotle before his teaching was formulated; in some cases he may even have caused Aristotle to modify an earlier position. Some of the *aporiai* recorded by the commentators may go back to these discussions. This may explain the combination of respect and freedom with which Theophrastus and his near contemporaries treat Aristotle's system, which sets them off from the scholastic writers of the Roman era. For those of us concerned with identifying Theophrastean material in a book or fragment, this has a practical consequence: the presence of Aristotelian ideas is no objection to a Theophrastean origin, unless there is independent evidence that Theophrastus differed from Aristotle on the point at issue.

III

When we consider the next generation, we come up against a problem of evidence. The Aristotelian corpus contains several works which cannot be genuine, but show clear signs of Theophrastus' influence. This can be demonstrated easily and clearly in the case of *Meteorologica* book 4 and the *De Coloribus*; the *De Lineis Insecabilibus* was attributed to Theophrastus by some ancient authorities. Then there are the *Problems*; the collection we have was probably compiled later, but it undoubtedly contains much Theophrastean material.¹⁹ Here we need more detailed analysis, but what we can learn for Theophrastus is probably

of the elements in *De Caelo* and *GC* on the one hand and in the *Meteorologica* and *PA* on the other, and Lennox (1985, 145), with nn. 12–13.

¹⁸ This has been well brought out by Steinmetz (1969, 224, 244); but his inferences concerning the chronology of Aristotle's writings are speculative and must be treated with reserve.

¹⁹ *Meteor.* 4: Gottschalk (1961), with references to subsequent discussions in the addenda to the German version, (1975, 138); Furley 1983, Strohm 1983 and Moraux and Wiesner 1983, p. VII. *De Color.*: Gottschalk 1968, 75ff. *De Lin. Insec.*: see Theophrastus 264.4 FHS&G. *Problems*: Flashar 1962, especially 333ff.

limited, since we can only recognise what belongs to him by its similarity to what we already know. In ethics the situation is even less clear.

On the other hand, we know the names of many contemporaries, but the only one from whom we have a substantial body of writings is Aristoxenus, whose specialised work only impinged on Theophrastus' at one point. For the rest we only have fragments and occasionally lists of titles. On the basis of this evidence we can make some general points. Most of these men devoted themselves almost entirely to writing of a fairly popular kind, on ethics, history or literary theory, confining their serious scientific work to at most one subject or branch of philosophy. Only Eudemus and Strato tried to continue Aristotle's work in all its branches, perhaps because they were heads of schools of Aristotelian philosophy, and even they show a tendency to specialisation: Eudemus wrote no ethical treatises and Strato was known as *ho phusikos* because of his special interest in natural philosophy.

In spite of these limitations, we can see an affinity between some of these thinkers and Theophrastus. In his *Harmonica*, Aristoxenus tried to distinguish his approach from that of earlier musical theorists. They, he says, either accepted the phenomena without making any serious attempt to explain them, or looked for explanatory principles outside their subject, by attempting to reduce musical intervals to numerical ratios; but the only correct method, he claimed, is to start from the phenomena, as observed by the trained ear of the musician, and from them to infer the underlying laws of harmony, always using explanations "in accordance with the phenomena" (*apodeixeis homologoumenas tois phainomenois*). To illustrate his meaning, let us take his definition of the tone: one group of his predecessors defined it as the ratio 8:9, but Aristoxenus as the difference between the fourth and the fifth. These definitions do not differ in substance, but Aristoxenus expressed his in purely musical terms, not as a mathematical ratio which could denote something quite different in another context.²⁰ In an article first published in 1952, Jaeger drew attention to a fragment of Diocles of Carystus (Fr. 112 Wellmann, from the *Hygieina*), in which Diocles makes much the same point (among others): it is mistaken to correlate the medicinal properties of any substance with any one of its perceived

²⁰ Aristoxenus *El. Harm.* 32.10ff., cf. 43.25ff. Meibom; cf. Gottschalk 1968, 457f., Brancacci 1984, 170ff., Barker 1985, 414f. The influence of Aristotle on Aristoxenus' methodology has been thoroughly analysed by Barker 1991.

qualities such as its taste or smell or whether it is hot or cold, because such correlations are speculative and uncertain; all that can be known empirically is that certain substances have certain effects, and this is the correct starting-point (*archê*) for reasoning (about treatments, etc.); to look for further causal explanations is unnecessary and inappropriate, since *archai* must be accepted without further analysis or demonstration.²¹ The resemblance to Theophrastus is clear enough. The Aristoxenus passage cited above has parallels both in his *De Musica* (716 FHS&G) and in the pseudo-Aristotelian *De Coloribus* (792b11ff.), and Diocles' point about the limits of aetiology is not so different from Theophrastus' critique of Plato's *psychogonia*.²² We find the same approach in Theophrastus' intuitive demonstration of the convertibility of universal negative statements (90 FHS&G, referred to above). Of course I am not suggesting that Aristoxenus and Diocles were directly influenced by Theophrastus, but rather that all three reacted to Aristotle's teaching in a similar way. Their fundamental agreement on questions of method did not prevent Theophrastus from criticising Aristoxenus' theory that musical notes are points in "musical space" and their pitch is determined by the intervals separating them from other notes (716.108ff. FHS&G).

We are told of personal interactions of Theophrastus with only three contemporaries, Dicaearchus, Phantias and Eudemus. In the first two cases, what we hear does not amount to much: a controversy with Dicaearchus as to whether the theoretical or practical life is to be preferred, and an obscure fragment of a letter to Phantias; with the latter Theophrastus shared his birthplace as well as an interest in botany, but there is no evidence of any major collaboration.²³ Theophrastus' rela-

²¹ Jaeger's belief that Diocles was a pupil of Aristotle, first advanced in 1938, has been severely criticised by, among others, Kudlien 1963, Torraca 1965 and von Staden 1992, but defended by others, including Longrigg (1995; I owe this reference to Dr. P. van der Eijk, but have known Longrigg's view from conversations and correspondence). No doubt his claim was exaggerated, but in the fragment cited in the text (112 Wellmann), the sentence πολλά τῶν ὄντων τρόπον τινὰ ἀρχαῖς τιςιν ἔοικε κατὰ φύσιν, ὥστε μὴ παραδέχεσθαι τὸν ὑπὲρ αἰτίου λόγον shows that Diocles' methodological reflections, at least, were strongly influenced by Aristotle; neither its doctrine nor its terminology can be traced back to an earlier source, certainly not to the Hippocratic writings on which Torraca and others claim that Diocles drew. For traces of Diocles' influence in the *Problems*, see Flashar 1962, 319f.

²² 159 FHS&G, referred to 287–88 above.

²³ Dicaearchus: Fr. 25 Wehrli = Theophrastus 481 FHS&G. Phantias: Fr. 7 =

tionship to Eudemus is more interesting. He was the only Peripatetic of Theophrastus' generation to write systematic treatises on logic and natural philosophy, and he also compiled a great History of geometry which has often been taken to have been a counterpart of Theophrastus' *Phusikôn* (or *Phusikai*) *Doxai*. But he does not appear to have been the author of any popular, 'exoteric' writings, and we hear of no works on ethics or literary theory. In logic, all his departures from Aristotle's syllogistic are attributed to him and Theophrastus jointly. In natural philosophy, each wrote a work entitled *Phusika*, but while Theophrastus' seems to have consisted of a series of monographs devoted to topics on which he felt that he had something new to say, including some dealt with in Aristotle's *De Caelo* and *De Anima*, Eudemus' *Physics* seems to have followed Aristotle's rather closely, covering the same ground point by point and only omitting book 7. Andronicus seems to have referred to him as an authority for his arrangement of Aristotle's work, and he corresponded with Theophrastus about textual problems.²⁴

The last contemporary to deserve a special mention is Neleus of Scepsis. He seems to have been completely undistinguished as a thinker and we do not hear that he wrote anything, but Theophrastus left him his books in his will, including, apparently, the manuscripts of Aristotle's *pragmateiai*. Why he should have done so has long been a puzzle; he cannot have seriously considered Neleus as his successor—apart from everything else, the latter must have been quite old. In an article published twenty years ago I suggested that Theophrastus wanted Neleus to be his literary executor and to continue the work of "publishing" his own and Aristotle's technical writings which he and Eudemus had begun.²⁵ I was led to this supposition by the parallels in the wills of Strato and Lyco, both of whom left their personal manuscripts to a relative or close friend, the latter with an explicit injunction to "publish them carefully." Neleus was probably the only living member of the school who had heard Aristotle lecture, and one may even conjecture that he had

Theophrastus 33A FHS&G; botany, Frr. 36–50 W.; Theophrastus' letter to Phantias: DL 5.37 = Phantias Fr. 4 W.

²⁴ Eudemus: logic, Frr. 7–22 Wehrli (no doctrine concerning syllogistic is attributed to Eudemus alone); cf. 286 above. Physics: Frr. 31–123, with Wehrli's notes; on the content of Theophrastus' *Physics*, see Regenbogen 1940, 1395ff. Andronicus: Eudemus Fr. 98 W. Theophrastus' letter to Eudemus: 157 FHS&G = Eud. Fr. 6 W.

²⁵ Gottschalk 1972, 335ff.; 1987, 1083ff., with references to other literature.

done some spadework on the manuscripts during Theophrastus' lifetime, perhaps under the latter's guidance. But evidently he did not get very far, perhaps because the task was too much for him; it takes a philosopher to edit the works of a major philosopher. The story to which this episode gave rise is familiar.²⁶ I shall waste no time on it, except to say why I think it important to free our minds of it. The failure of the Hellenistic Peripatos to exploit Aristotle's work or to develop it in a positive way is a real problem, and the tale of the "cellar of Sceptis" was used (and possibly invented) as a facile explanation; as long as we allow ourselves to be taken in by it, we shall not be able to face the real problem squarely. But to end this section on a positive note, we can certainly say that some beginning was made with editing Aristotle's works two centuries or so before Andronicus.

IV

The evidence for the generation after Theophrastus is much the same as for his contemporaries. We know enough about Strato to be certain that his philosophy was a continuation of that of Aristotle and Theophrastus, with his reading of Aristotle largely determined by the questions Theophrastus raised. The doctrine of microvoids (see 286 above), the most far-reaching change in Aristotle's natural philosophy which we can firmly attribute to Theophrastus, was developed to the point that Strato believed all bodies, even including light-rays (which Strato conceived of as material) to consist of microscopic particles with interspersed voids. As recently in 1950 an editor of Strato's fragments claimed that he occupied an intermediate position between Aristotle and the Atomists, but this has been shown to be mistaken; Strato's particles are not the basic building-blocks of which the world is made up, but rather *de facto* divisions of matter, the end-point, not the starting-point, of his cosmology. Other features of Aristotle's system, which Theophrastus had queried but left in place, were now changed or abandoned. Strato returned to a three-dimensional model of space similar to one rejected by Aristotle; no doubt he was influenced by Theophrastus' critique of the one Aristotle preferred. He abandoned the Unmoved Mover and the notion that the heavens were composed of a "fifth substance"; in his view the heavenly bodies were composed of fiery sub-

²⁶ See Gottschalk 1987 (1083ff.), with references.

stance and the only power governing the physical world was an immanent, unconscious Nature. Unfortunately we have to rely on a very unsatisfactory account of Cicero's at this point, and are neither told how this Nature operates nor what arguments Strato used against Aristotle.²⁷

As before, we can perhaps learn more from the spurious works included in the Aristotelian corpus. I have mentioned the *Problems* already. The collection we have was probably compiled in the middle of the third century and some of the material it contains can be traced to Strato as well as Theophrastus; occasionally attempts are made to confront their doctrines or to mediate between them.²⁸ But there is one work which begins with a direct criticism of Theophrastus and which allows us to trace a debate about one subject through three generations, from Aristotle to Strato. This is the *De audibilibus*, whose subject is how sounds are produced and differences of pitch originate. It had long been recognised that high pitch is connected with fast or violent movement, and early theorists like Archytas, and even Plato, thought that it was due to the speed with which high-pitched sounds are propagated. Unfortunately they also connected fast movement with loudness, and this implied that high notes must be louder than low ones. Archytas (47 B1 DK) actually appeals to this as an accepted fact in order to prove the connection between high pitch and swift movement. What was needed was a theory making it possible to distinguish the factors governing pitch and loudness.

The problem was first raised by Aristotle in the *GA* (787a2ff.), in connection with animal voices. He tried to solve it by making a distinction between the volume of air expelled from an animal's lungs and the force with which it is expelled: loudness, he claimed, depends on the volume and pitch on the force. Thus an animal expelling a large amount of air with great force would make a loud, high sound, one which expelled a small amount slowly a quiet, deep one, and so on. The use of several factors with the outcome depending on their balance anticipated a device frequently used by Theophrastus, as we have seen (287 above), but Aristotle did not show how this mechanical explanation fitted into his general theory of sound. Here was an obvious loose end needing to be

²⁷ Matter and void: Strato Frr. 54–67 Wehrli, cf. Gottschalk 1965, Furley 1985, Algra 1989, 45ff. Place: Strato Fr. 59 W., cf. 285 above and Sorabji, 206 above. Cosmology: Strato Frr. 84–86 W. Nature: Strato Frr. 32–39 W.; cf. Gottschalk 1976, 92.

²⁸ Flashar l.c. (above, n. 19).

tied up, and from Priscian's *Metaphrasis*, together with a fragment of Theophrastus' *De Musica* preserved by Porphyry, we can see how Theophrastus set about it. He started from Aristotle's general theory of sense-perception, according to which sensation is a qualitative affection passed from the object through a medium to the subject, and asked what exactly was the affection undergone by the medium. He agreed with Aristotle that it must be a qualitative change, but claimed that it was a different one for each sense. In the case of hearing, he suggested, it was a kind of shaping (*schêmatizesthai*) of the medium, usually air (277A FHS&G). Priscian does not elucidate this any further, but in the *De Musica* (716.88 FHS&G) Theophrastus suggests that high notes differ from low by reason of their "shape" (*schêma*), inasmuch they travel in a straight line from the object to the ear, while low ones spread more evenly all round the object.²⁹ In this way Theophrastus claimed to account for the alleged fact that high notes can be heard further from their source than low ones, while denying that they move with greater speed or require greater force for their production.

This explanation was not intended to be a criticism of Aristotle but to elucidate his teaching; it may have been inspired by Aristotle's suggestion that spoken words may be misheard if the air conveying them is "reshaped" (*metaschêmatizesthai*) in its passage to the hearer.³⁰ But it still lacked definition and was brusquely rejected by Strato and by the author of the pseudo-Aristotelian *De Audibilibus*, probably Strato himself.³¹ In its place *De Aud.* offers a much more sophisticated theory:

²⁹ He does not say what is transmitted, but at line 93ff. he refers to the vibrations which can be felt in the instrument or in the chest of a singer when a low note is sounded, as evidence for his view. Barker (1985, 311 and n. 21) denies that *schêmatizesthai* in Priscian refers to the same theory as *schêma* in the *De Musica* fragment and even suggests that Priscian may have been mistaken. But it is not easy to see how Priscian could have arrived at such a notion if he did not find it in his source (the only other philosopher known to have used such an idea in his account of sound-production is Democritus [68 A 128 DK]), and his account of Theophrastus' *aporiai* concerning reason, which has a parallel in Themistius (= 307A FHS&G), suggests that Priscian's reports are reliable. But if Priscian is right, it is arbitrary to claim that the same term denoted something entirely different in the *De musica*. Barker is right when he says that Theophrastus is not primarily concerned with the physical nature of sound in this fragment, but this makes it more rather than less likely that he should have used ideas from a different work when he had to touch on the subject. The notes in Barker's translation (1989, 116) add nothing to what he says in his earlier paper.

³⁰ Aristotle *De Sens.* 446b9, cf. Alex. ad loc. 126.16ff.

³¹ Cf. Gottschalk 1968, 436, 459f.

sounds are caused by a series of pulses in a medium, usually air, passed from the source to the ear. Each particle of the medium passes the movement to the next until it reaches the ear, but the medium as a whole does not travel through space. The pitch of the resulting sound is governed by the frequency of the pulses, its loudness and such characteristics as hardness and softness by the strength and character of the blow which gave rise to them, whether caused by breath, in the case of vocal sounds, or a mechanical instrument. Since he knew nothing of harmonics, the writer was unable to give a clear account of these properties; in spite of this, his theory is a great advance on previous ones and anticipates the essential points of the correct explanation. But it also preserves the best features of earlier doctrines: by linking pitch with frequency it accounts for the time-honoured observation connecting the chief harmonic intervals with simple numerical ratios, and its insistence that the material of the medium is not displaced would more or less satisfy Aristotle's insight that sensory movements transmit the form of the stimulus without its matter. Here we have a real example of Aristotle transformed as a result of continuing debate within his school.³²

The habit of debate did not die out with Strato. The pseudo-Aristotelian *De Spiritu*, probably written in the middle of the third century, contains a reassertion of the teleological principle (485a4ff.) and casts doubt on the doctrine that the soul can be identified with pneuma (483a25ff., 485b7ff.); both points seem to be directed against Strato's teaching, although he is not named.³³ Other debates can be traced in the *Problems*.³⁴ But then a decline set in. Cicero has preserved a list of Peripatetics in which the founders, Aristotle and Theophrastus, are contrasted with their successors, from Strato to Critolaus and his pupils, none of whom are said to have measured up to them.³⁵ Eudemus seems to have been forgotten; there is no *Life* of him in Diogenes Laertius, Cicero never mentions him and he was only rediscovered by the Aristotelian commentators of the Roman era. Theophrastus' name survived, together with Aristotle's, as representative of Aristotelian philosophy in compendia like those of Areius Didymus on ethics or Sextus Empiricus

³² Another ongoing debate of the same kind has been reconstructed by Mansfeld 1992; see esp. pp. 314ff. and 331ff.

³³ Cf. Jaeger 1913–1960, 100f. (but his view that the last chapter of the book differs from the rest and contains Stoic doctrine, is mistaken).

³⁴ See Flashar 1962, 324 n. 2.

³⁵ Cicero *De Fin.* 5.12ff., *De Off.* 1.3.

on the criterion of knowledge, but the doctrines attributed to them have been conflated and contaminated with later ideas. I suspect that this was not done by Areius and compilers like him, but by later members of the Peripatos anxious to participate in the mainstream philosophical debates of their time; but this is something on which my research is still incomplete.

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Theophrastus, the Academy, and the Athenian Philosophical Atmosphere

John Glucker

Once, it was taken for granted among scholars that, in order to obtain a clear picture of an author whose work has not survived, all one had to do is study a collection of his fragments and testimonia.¹ Recently, more and more people have come to realize that “collections of fragments of ancient philosophers (...) however useful or necessary, are like petrified museums, or like collections of paintings or snuff-boxes assembled by individuals which have been left as they were (...) the selection itself depending on the judgement and prejudice of the person in charge of the exhibition.”² Perhaps not quite. Most editors of fragments today, whatever principles of selection and arrangement they may follow, attempt to reach at least some degree of *Vollständigkeit*. Yet the arrangement, and the decision as to what should be quoted in full, or in part, or only indicated by references and cross-references, is still in the hands of each

¹ Editors of fragments were not always quite so sanguine. See, e.g., Hermann Diels' edition of Heraclitus (*Herakleitos von Ephesos* [Berlin 1909] xv): the aim of the collection is ‘die erste Bekanntschaft Heraklits zu vermitteln’ (emphasis mine).

² Jaap Mansfeld, *Historiography in Context: Hippolytus' Elenchos as a Source for Greek Philosophy* (Leiden 1992) xiv.

editor. The experienced scholar will always use any collection as an index, and study each passage in the wider context of the sources themselves.

The editors of the Leiden edition of the fragments and testimonia of Theophrastus decided to include, under the heading *Magister et discipuli*, only six passages referring to Theophrastus as a teacher in general terms. For individual pupils and his relations with each of them, they provide an alphabetical list, with references to sources concerning each pupil.³ Nor does this section include information about Theophrastus as a teacher which is already contained in the Diogenes Laertius *Vita*, since this has already been printed as 1 FHS&G (*sub Vitae descriptiones*). A *lector candidus* who has not realized this may miss the important information conveyed in §37 of that *Vita* (1.16–21), that Theophrastus had two thousand μαθηταί in his πανήγυρις, and that, in a letter to Phanias, he complained of the burden of lecturing, both to a large audience (πανήγυρις) and to a small group (συνέδριον),⁴ as inter-

³ *Theophrastus of Eresus, Sources for his Life, Writings, Thought and Influence*, edited and translated by W. W. Fortenbaugh, P. M. Huby, R. W. Sharples and D. Gutas, (Leiden 1992) 1.62–71. (Plain references to fragments and/or page numbers will be to this edition—FHS&G.) The editors state clearly in their introduction: “Our decision has been to produce a source book and not a collection of fragments narrowly construed” (5), and the word ‘influence’ appears in the title. Why, then, give only references to sources concerning teacher-pupil relations—all as one fragment 18? But then, most histories of ancient philosophy have little time to waste on this issue of master-pupil relations: here, at least, we have a comprehensive index.

⁴ I have left in the Greek words intentionally. Diogenes says: ἀπὸ τῶν εἰς τὴν διατριβὴν αὐτοῦ μαθηταὶ πρὸς δισχιλίους. διατριβή may mean ‘a philosophical school’ as an institution, or a philosophical discussion, or a place of study and lectures: see my *Antiochus and the Late Academy* (Göttingen 1978) 162–66. μαθητής may look more promising, as against mere ἀκουστής. But a look at Janáček’s Index shows that, however frequent Diogenes’ use of the verb ἀκούω may be, both for ‘proper’ pupils and for ‘auditors,’ Diogenes never uses the noun ἀκουστής. He uses μαθητής frequently, both for a mere auditor (e.g., 2.49: Gorgias gave courses, but never founded a school) and for proper pupils of a school—very often in the standard section, towards the end of the biographical part of a *Vita*, with the formulaic μαθηταὶ δ’ αὐτοῦ and variants (e.g., 3.46 of Plato, 6.95 of Menecrates, 7.36 of Zeno, 10.22–23 of Epicurus): the formula is as old as Philodemus, and probably originated with founders of the διαδοχαὶ literature like Sotion and Hippobotus). R. E. Wycherley, “Peripatos: The Athenian Philosophical Scene,” *Greece and Rome* 9 (1962) 2–21, esp. 10–11, was right in thinking that the answer lies with ἀπὸ τῶν and guessed right when he referred it to “the less specialized evening lectures instituted by Aristotle.” We do have some evidence for this. Of Arcesilaus, Diogenes says: πειστικός τε ὑπὲρ ἅπανθ’ ὄντινόν· παρ’ ὃ καὶ πλείους πρὸς αὐτὸν ἀπὸ τῶν εἰς τὴν σχολὴν καίπερ ὑπ’ ὀξύτητος αὐτοῦ

fering with the preparation of his work for publication.⁵ A χρεία ascribed to Zeno of Citium by Plutarch (*Mor.* 78D = 15 FHS&G), ὁ ἐκείνου χορός ... μείζων, οὐμὸς δὲ συμφωνότερον, seems to confirm both the large number of Theophrastus' auditors and the lack of cohesion and 'group spirit' among them.⁶

Clearly, not all went well with Theophrastus' pupils. Leaving one school for another was no unusual practice in Athens of that time. When we hear of Metrodorus ὁ θεωρηματικός (18.13 FHS&G) and of Timagoras of Gela (18.20) who left him for Stilpo of Megara (both DL 2.113), we should not be surprised. Stilpo was a brilliant dialectician, and "almost the whole of Greece" came to listen to him, including pupils of other schools who are also cited by name (DL, *ibid.*). Bion of Borysthenes, if he left Theophrastus for Crates the Cynic, may be a more indicative case.⁷ A better-documented case is that of Metrocles.

ἐπιπληττόμενοι. ἀλλ' ἔφερον ἡδέως (4.37); of Pythagoras: τῶν θ' ἑξακοσίων οὐκ ἐλάττους ἐπὶ τὴν νυκτερινὴν ἀκρόασιν ἀπήντων αὐτοῦ (8.15).

I can find no evidence for πανήγυρις as public lecture, but the general sense of the word should make this clear. For συνέδριον see DL 8.39: ἐτελεύτα δ' ὁ Πυθαγόρας τοῦτον τὸν τρόπον· συνεδρεύοντος μετὰ τῶν συνήθων ἐν τῇ Μίλωνος οἰκίᾳ τούτου ὑπὸ τινος τῶν μὴ παραδοχῆς ἀξιωθέντων διὰ φθόνον ὑποπρησθῆναι τὴν οἰκίαν συνέβη. συνήθης is used for a close personal pupil: e.g., Plutarch *Moralia* 736D, DL 8.40, 9.102. The passage would gain some sense if the student who had not been deemed worthy of acceptance into Pythagoras' *privatissimum* set fire to the house while that very same *privatissimum* was being held in it. For τούτου read, perhaps, τοῦ μαθητοῦ or τοῦ μαθητοῦ (συνήθους?) αὐτοῦ.

⁵ Fritz Wehrli, *Die Schule des Aristoteles*, vol. IX (Basel and Stuttgart, 1969)], Phantias Fr. 4, p. 9 (text), 27 (commentary). See also J. P. Lynch, *Aristotle's School* (University of California 1972) 91–92.

⁶ If the χρεία is genuine, it would imply that, although Zeno taught in a public place, Theophrastus—wherever he lectured—still attracted more pupils at some stage. Surely, Zeno would not have compared his 'seminars' to Theophrastus' public lectures.

⁷ Our only source is DL 4.23; 51–52 = T 19–20 in J. F. Kindstrand, *Bion of Borysthenes: A Collection of the Fragments with Introduction and Commentary* (Stockholm 1976) 109 (text), 160–67 (commentary). In his Introduction (56–73), Kindstrand accepts the sequence described by Diogenes: Academy > Crates (?) > Theodorus of Cyrene > Theophrastus. That the Crates mentioned by Diogenes must be the Cynic, not the Academic (*semper hic erro!*), was pointed out by Hans von Arnim, *RE* III.1, 483–85 (Bion 10). There is thus already some confusion in Diogenes' account. Kindstrand, 73–78, esp. 77–78, emphasizes the overwhelming Cynic character of Bion's philosophy. Diogenes is never too reliable in his historical sequences. Could Bion have been a pupil, or auditor, of Theophrastus before he left for Crates the Cynic (just like Metrocles)? Could Diogenes have found in his sources the sequence Academy (Crates) > Theodorus > Theophrastus > Crates (the Cynic), and omitted the second Crates since 'a Crates' had already been mentioned?

Here we have two stories, both attesting to his unhappiness at the school of Theophrastus and to his leaving it for Crates the Cynic. The first, extant in an epitome of a homily by Teles the Cynic,⁸ describes the demands made on Metrocles' pocket by the extravagant way of life of Theophrastus' student-circle, and compares it with the simplicity and frugality of Crates the Cynic and his pupils. The second, narrated by Diogenes Laertius (6.94–95), tells of a 'kleines Missgeschick'⁹ which happened to him while studying with Theophrastus, and how Crates saved him from committing suicide and 'converted' him to Cynicism. Diogenes adds that, according to one tradition, Metrocles burnt the lecture-notes (ἀκροάσεις) of Theophrastus. But the 'accident' happened to him while he was μελετῶν—a verb used for private study, or, at the most, of study in a small group; and the story would lose its point if Theophrastus were not supposed to be present, and, at least, to do nothing to alleviate Metrocles' shame. (Being—as the Teles story makes clear—a member of Theophrastus' 'inner circle,' why should Metrocles not participate in a small 'study-group'—συνέδριον?—conducted by the Master himself?) The two stories do not exclude each other. Metrocles may have been unhappy in the school of Theophrastus anyway, and the 'unpleasant incident' may only have been the last straw. The source for the Teles story—it has been suggested—is probably Bion.¹⁰ Diogenes' source sounds Cynic as well, and it may have been the same Bion. Even if both stories should be taken as Cynic fabrications,¹¹ there is no smoke without a fire. Theophrastus' words in his letter to Phanias indicate that even members of his 'inner circle' were regarded as something of a burden.

The pupil we are most concerned with is Arcesilaus of Pitane, "founder" of the "New," or "Second," Academy.¹² That he was a pupil of Theophrastus and left him for Polemo's Academy is attested by Philodemus (*Ind. Acad.*) and Diogenes—part, at least, of whose evidence is derived from Arcesilaus' contemporary Antigonos of

⁸ Otto Hense (ed.) *Teletis Reliquiae*, 2nd ed. (Tübingen, 1909) 40–41. Our source is Stobaeus.

⁹ The expression used by Kurt von Fritz, *RE* XV.2, 1483–84 (Metrokles).

¹⁰ Hense, 1909, *Prolegomena* XXXV.

¹¹ K. von Fritz (above, n. 9) seems to accept both stories as historical.

¹² See *Antiochus* (above, n. 4) 103–6; 234–35; 345–46.

Carystus—and by Numenius.¹³ What is more, we have the evidence of Diogenes (4.29–30) and Numenius (Fr. 25 des Places, 58f.) that Theophrastus was attracted by the young and good-looking Arcesilaus, and became κνιζόμενος when he left him for Crantor and the Academy.¹⁴ Arcesilaus may have had personal reasons (Crantor's love for him) for joining the Academy in the first place, but he had no personal complaints (like those of Metrocles) as reasons for leaving Theophrastus.

When he became the head of the Academy, Arcesilaus changed the direction of the school from the 'mild dogmatism' of his predecessors to what was later (and is now) labelled 'scepticism'. Whatever contemporaries and later sources may have maintained, the Academic tradition—probably originating with Arcesilaus himself—is unanimous in ascribing his scepticism to his view of Socrates and Plato.¹⁵ The view advanced many years ago by Alfons Weische, that Theophrastus and his school were the main source of Arcesilaus' scepticism, has never won much acceptance.¹⁶ The only ancient source which appears, at first sight, to speak of some influence of Theophrastus on Arcesilaus, is Numenius (Fr. 25 des Places, 10–19). When Zeno and Arcesilaus, both pupils of Polemo the Academic, began to disagree—says Numenius—each of them 'conscripted as allies' (συμπαρέλαβεν) some older and respected philosophers,

¹³ References: 18.2 FHS&G. Add now Filodemo, *Storia dei Filosofi, Platone e l'Accademia*, ed. Tiziano Dorandi (Napoli 1991) col. 15.3f., 147. The section of *Ind. Acad.* was not yet available to U. von Wilamowitz-Moellendorf, *Antigonos von Karystos* (Berlin 1881), where only Diogenes is cited.

¹⁴ Von Wilamowitz (1881, 49) cites both passages as derived from Aristippus, περὶ παλαιᾶς τρυφῆς; but both may have come from Antigonos, who seems—in a passage we shall soon discuss—to be quite sympathetic to Arcesilaus' move from the school of Theophrastus to the Academy.

¹⁵ See *Antiochus* (above, n. 4) 31–47. Julia Annas, "Plato the Sceptic," *Oxford Studies in Ancient Philosophy*, Suppl. Vol.: *Methods of Interpreting Plato and his Dialogues* (Oxford 1992) 43–72, does not seem to be aware of that part of *Antiochus* (as her note 1 on p. 43 seems to show)—unless she had decided that what is said there is not worth pursuing. She follows much of the evidence I discuss in that section, but her main concern is with the interpretation of Plato's dialogues as they are understood today. My main aim was to attempt, as far as possible, to forget modern interpretations of Plato and see how an Arcesilaus could construe a 'sceptical' view out of his dialogues.

¹⁶ For Weische's view, and some criticisms, see Appendix to this article.

ὁ μὲν [Ζήνων] Ἡράκλειτον καὶ Στίλωνα ἅμα καὶ Κράτητα, ὧν ὑπὸ μὲν Στίλωνος ἐγένετο μαχητής, ὑπὸ δ' Ἡρακλείτου αὐστηρός, κυνικός δ' ὑπὸ Κράτητος· ὁ δ' Ἀρκεσίλαος Θεόφραστον ἴσχει¹⁷ καὶ Κράντορα τὸν Πλατωνικὸν καὶ Διοδώρον, εἴτα καὶ Πύρρωνα, ὧν ὑπὸ μὲν Κράντορος πιθανουργικός, ὑπὸ Διοδώρου δὲ σοφιστής, ὑπὸ δὲ Πύρρωνος ἐγένετο παντοδαπὸς καὶ ἴτης καὶ οὐδέν.

One notes that Heraclitus, Crates the Cynic, and Stilpo each 'contributed' something to Zeno's character in his battle with Arcesilaus, just as Crantor, Diodorus and Pyrrho to Arcesilaus' character and battle. Theophrastus is mentioned in the list of allies, but Numenius knows of no 'contribution' of his to Arcesilaus' fight against Zeno. A clause may have been omitted in the archetype, but I doubt it. Theophrastus' name may well have crept in because Numenius knew—he is about to tell us the story at lines 57f.—that Arcesilaus left him for the love of Crantor. If we leave Theophrastus out, we have three 'allies,' on each side—in both cases, philosophers who were known to have influenced them. In the case of Arcesilaus—if we take Crantor to represent, in this context, the Platonic tradition (or else, why emphasize, only in this case, that he was ὁ Πλατωνικός? Crates there were more than one, but only one Crantor)—we have here the three philosophers who, according to a parody on a Homeric verse by Arcesilaus' contemporary Aristo of Chius, were Arcesilaus' masters.¹⁸ This line of Aristo is quoted by Numenius himself in his next sentence, beginning with the words ὁ [ὅθεν Leemans] καὶ ἐλέγετο περὶ αὐτοῦ

No influence, then, of Theophrastus on Arcesilaus' way of doing philosophy; nor for all I know, on any of his followers in the 'sceptical' Academy. Even at a time when the early Peripatos began to be mentioned again in Academic circles, probably under the influence of Panaetius, Antiochus, and Andronicus' edition of the acroamatic works of Aristotle, Cicero—representing an Academic source¹⁹—can say: *si*

¹⁷ A strange use of ἴσχω with a human object and in the sense of 'hold as an ally.' Numenius' use of poetic language has still to be more thoroughly investigated.

¹⁸ SVF 1.343–44, p. 77: πρόσθε Πλάτων, ὅπτιθεν Πύρρων, μέσσος Διοδώρος.

¹⁹ On his possible source: Antiochus (above, n. 4) 406–20, esp. 412–13. Clitomachus is not the direct source, but much in Cicero's speech is probably derived from him, as represented by Philo. More recently, Carlos Lévy, *Cicero Academicus, Recherches sur les Académiques et sur la philosophie de Cicéron* (Rome 1992) 181–204, has argued for Antiochus' *Sosus* as the sole source of all parts of Cicero's speech in *Lucullus*. I have briefly stated some of my reasons for rejecting this view in my review of Lévy's book, *Gnomon* 68 (1996) 218–21, esp. 219. Our particular passage is unlikely to come from Antiochus—even representing 'the enemy'. Compare his words of unadulterated

enim mihi cum Peripatetico res esset ... cum simplici homine simpliciter agerem nec magno opere contenderem (Lucullus 112). The context is that of καταληπτική φαντασία and ἀκαταληψία, the main issue between Stoics and Academics since Zeno and Arcesilaus (and the main issue between these two in Numenius' story). Even for a late Academic source, the Peripatetics are not worth bothering about.

Arcesilaus may have left Theophrastus' school for Polemo's Academy, in the first place, because of his erotic relation with Crantor. At a later stage, he clearly became dissatisfied with the previous orientation of the school, and changed it when he became scholarch. But there was something else, besides Crantor's love, which he discovered in the Academy soon after he left Theophrastus' school. Arcesilaus' statement—the source for which is his contemporary Antigonos of Carystus²⁰—is preserved for us by two sources in almost the same words:

Philodemus, *Ind. Acad.* 15.3–10 Dorandi:²¹

Ἐφη δ' Ἀρκεσίλαος ὅτι αὐτῷ παρὰ Θεοφράστου μετελθόντι φανείσαν οἱ περὶ τὸν [Π]ολέμωνα θεοὶ τινες ἢ λείψανα τῶν ἀρχαίων ἐκείνων καὶ τῶν ἐκ τοῦ χρυσοῦ γένους διαπεπλασμένων ἀνθρώπων.

Diogenes Laertius 4.22:

... ἔνθεν καὶ Ἀρκεσίλαον μετελθόντα παρὰ Θεοφράστου πρὸς αὐτοῦς²² λέγειν ὡς εἶεν θεοὶ τινες ἢ λείψανα τῶν ἐκ τοῦ χρυσοῦ γένους.

I have underlined the similar or parallel words. If we had only Diogenes' version, one would have had to settle for 'relics of the Golden Age' *tout court*. Since the most frequent sense of λείψανον with the genitive of person is that of 'remains of the dead,' we would be faced with the strange notion of the "remains" of people who, according to Hesiod (*Op.* 122–23) became δαίμονες ... ἐπιχθόνιοι.²³ But we do have Philodemus' version, which adds διαπεπλασμένων ἀνθρώπων

praise for the Peripatetics in *De Fin.* 5.9–14, where Cicero's source is clearly Antiochus (5.8).

²⁰ Von Wilamowitz 1881, 67.

²¹ Dorandi 1991, 147.

²² From the context (21): Polemo and Crates.

²³ As a θαυμαστής of Plato (*DL* 4.32), Arcesilaus may have been familiar with Plato's reading (*Crat.* 397E) of verse 121, κατὰ μοῖρ' ἐκάλυψε—on which see M. L. West (ed.), *Hesiod, Works and Days* (Oxford 1978) 181 (on 121). But this would make things even worse: in that case, even their bodies were not buried.

(and makes sense of ἐκ!). The compound διαπλάττω, according to our dictionaries, is not found earlier than Philo of Alexandria (who uses it quite often for the creation of man). But Philo often employs words he has taken from everyday speech. With the natural tendency of Greek to turn simple words into compounds, there is no reason to reject this verb as an invention of Philodemus. Even if it were, Arcesilaus could have used πλάττω, which is Attic, Platonic and *glatt-kosher*. Arcesilaus knew what he was doing—echoing, not just the Hesiodic myth of the men of the Golden Age, who (*Op.* 112) ὥστε θεοὶ δ' ἔζωον and are even now δαίμονες, but also a Platonic variant on that myth:

Plato, *Resp.* 3, 415A4–5:

... ὁ θεὸς πλάττων, ὅσοι μὲν ὑμῶν ἱκανοὶ ἄρχειν, χρυσὸν ἐν τῇ γενέσει συνέμιξεν αὐτοῖς, διὸ τιμιώτατοί εἰσιν.

That Plato's myth was based on Hesiodic *motifs* is indicated by Plato himself at 546E–547A. The myth was later interpreted, with Hesiodic references—and adding Orpheus into the bargain—in 'neo'-Platonism (Proclus *In Rem Publ.* 2.74–78 Kroll). It is most likely that Arcesilaus combined the Hesiodic and Platonic elements, seeing in the living members of Polemo's Academy λείψανα of a Golden Age—that of Socrates, Plato and their friends—who were also 'philosopher-kings' *in potentia*, ἱκανοὶ ἄρχειν, and at least one of them was ὁ θεῖος Πλάτων.²⁴ These heroes of the Golden Age of Athenian philosophy were all now δαίμονες ἐπιχθόνιοι,²⁵ the λείψανα which are still alive in Polemo's school.

²⁴ The myth of Plato's Apollonian birth is as early as Speusippus: see Speusippo, *Frammenti*, ed. Margherita Isnardi Parente (Naples 1980) Fr. 147, 121 (text), 384–87 (commentary); Alice Swift Riginos, *Platonica* (Leiden 1976) 9–32; Heinrich Dörrie–Matthias Baltes (edd.), *Der Platonismus in der Antike* Bd. 2 (Stuttgart–Bad Constanz 1990) 58.1–8, pp. 150–56 (texts), 405–14 (commentary). The use of the epithet θεῖος for Plato is at least as early as Panaetius (Fr. 56 Van Straaten = Cic. *Tusc. Disp.* 1.79) and Posidonius (T 97 Edelstein–Kidd = Galen, *De plac. Hipp. et Pl.* at IV.421 K.). See also Cicero, *De Nat. Deor.* 2.32 and Pease's note.

²⁵ Arcesilaus most probably did not read lines 124–25 of *Op.* (as they are printed today) in his text of Hesiod. These lines—a duplicate of 254–55—are athetized by most editors. They were unknown, in this place, to Plutarch, Macrobius and Proclus, and are not in the two papyri containing this passage: see West (above, n. 23), 101 (apparatus), 183 (note on 124–25). For Arcesilaus—even if he adopted Plato's reading (n. 23)—they were still δαίμονες ἐπιχθόνιοι.

"The living dead." One is reminded of a somewhat similar story concerning Zeno of Citium:

Diogenes Laertius 7.2 (SVF 1.1, p. 3.14–17):

Ἐκάτων δὲ φησι καὶ Ἀπολλώνιος ὁ Τύριος ἐν πρώτῳ περὶ Ζήνωνος, χρηστηριασαμένου αὐτοῦ τί πράττων ἄριστα βιώσεται, ἀποκρίνασθαι τὸν θεόν, εἰ συγχρωτίζοιτο τοῖς νεκροῖς· ὅθεν ξυνέντα τὰ τῶν ἀρχαίων ἀναγινώσκειν.

Apollonius of Tyre, as Strabo (16.2.24) tells us, was a contemporary of Strabo himself and an expert on Zeno.²⁶ Hecato, a pupil of Panaetius and Posidonius, was an author of a number of philosophical works, including a collection of *χρεῖαι*.²⁷ Both are cited in a number of places by Diogenes. The story was thus current in Stoic circles a little over a century after Zeno's death.

Whether this was a genuine oracle or a made-up story is irrelevant to our discussion.²⁸ What matters is what it means. Diogenes (and, perhaps his source, if the reported speech is correct here) ascribes the words ὅθεν ... ἀναγινώσκειν to Hecato and Apollonius. But would Zeno have interpreted it that way? Diogenes himself, citing Demetrius Magnes, tells us another story:

DL 7.31 (= SVF 1.6, p. 7, 10–13):

Φησὶ δὲ Δημήτριος ὁ Μάγνης ἐν τοῖς Ὁμωνύμοις τὸν πατέρα αὐτοῦ Μνασέα πολλὰκις ἅτ' ἔμπορον Ἀθήναζε παραγίγνεσθαι καὶ πολλὰ τῶν Σωκρατικῶν ἀποφέρειν ἔτι παιδὶ ὄντι τῷ Ζήνωνι· ὅθεν καὶ ἐν τῇ πατρίδι συγκεκροτῆσθαι.

Unless we assume that Zeno, ἔτι παῖς ὢν, sent his father especially to

²⁶ H. von Arnim, *RE* II.1, 146 (Apollonius 94).

²⁷ Latest edition: H. Gomoll, *Der Stoische Philosoph Hekaton* (Bonn 1933). Our passage is Fr. 26 Gomoll. The text of the oracle, in iambic trimeter, and the various sources, are supplied by H. W. Parke and D. E. W. Wormell, *The Delphic Oracle*, Vol. 2 (Oxford 1956) no. 421, 170–71.

²⁸ See, e.g., Joseph Fontenrose, *The Delphic Oracle, Its Responses and Operations* (Berkeley and Los Angeles 1978) 341, Q. 224. Fontenrose regards this one as a 'quasi-historical response.' But the comic poet using this verse *might* have related it to Zeno's story—otherwise, why should a later source pick on this verse and embroider a story around it? Philosophers were common targets for comedy ever since it began. And why should the occasion be "need of profession"? The question τί πράττων ἄριστα βιώσεται can perfectly fit the old Platonic question ὅντινα τρόπον χρὴ ζῆν. Q. 201, 208, 248 and 259 are not real parallels.

Delphi to consult the oracle on his behalf (and what would an exporter-importer do in that area for his trade?), the oracle-story must be related to a more mature Zeno, now in Athens, already well-trained τοῖς Σωκρατικοῖς and needing no oracle to tell him to read the books of the ancients.

If ὅθεν ... ἀναγινώσκειν was supplied by a later source, we are left with the words of the oracle. συγχρωτίζομαι means literally to rub one's skin against someone else's, or simply to get in physical contact.²⁹ Unlike our "rub shoulders," which has become a metaphor for any kind of contact, even the most abstract one ("to rub shoulders with Aeschylus," for example), Greek has never quite lost the physical aspect of this verb. Even today, συγχρωτίζομαι and συγχρωτισμός can only refer to physical contact or, at the least, to a meeting face to face.

If the oracle commanded Zeno to get in physical contact with the dead, or at least to meet them face to face, books—which he had been reading anyway—would not do. Our passage of Diogenes follows the list of Zeno's teachers, and the last of words before our story are ἀλλὰ καὶ Πολέμωνος. A few lines later, Diogenes tells us another story, of how, on arrival in Athens, Zeno came to follow Crates the Cynic. He was sitting in a bookshop reading Book 2 (note the precision!) of Xenophon's *Memorabilia*: ἡσθεῖς ἐπύθετο ποῦ διατρίβοιεν οἱ τοιοῦτοι ἄνδρες. Crates happened to pass by, and the bookseller told Zeno to follow him. (Note again: Zeno is described as looking for *men* like those in the past, not for ancient *books*.) One of his experiences with Crates, which Diogenes connects with this story (but it may have happened later: Zeno learnt much from the Cynics), sounds like the reverse of the Crates and Metrocles story: this time, it was Crates who put his pupil to shame. At some stage, Zeno decided that these were not the Socratics he sought. Could it be that it was then—if the story was originally told by Zeno himself—that he consulted the oracle, and was told to join 'the living dead'—like Arcesilaus, at the Academy?

Both Zeno and Arcesilaus came to Athens out of love for philosophy: Zeno had already given himself a grounding in Socratic literature; Arcesilaus had rejected the advice of his elder brother Moereas to make

²⁹ Two other ancient passages, apart from ours, cited by LSJ are *Corpus Hermeticum* 10.17 (Stobaeus' reading, adopted by editors) and 12.10. In both cases, the context makes it clear that the reference is to physical contact. So it is in the passage of Eustathius they cite. Why they call this contact "defiling" I cannot imagine.

his career in rhetoric, because (DL 4.29) φιλοσοφίας ἦρα. Both tried a number of Athenian philosophers and ended in Polemo's Academy³⁰—in both cases since here 'the dead'—the glorious past of Athenian philosophy—were still alive.

Before we draw more conclusions, let us consider a few others who studied philosophy in Athens in the same period.

Erasistratus is said by Diogenes to have been—as some say—a pupil of Theophrastus (εἰσιν οἱ λέγουσι· καὶ εἰκός; 5.57 = 18.8 FHS&G; cf. 3.47). Galen (*An in arteriis natura sanguis contineatur* 7 = 47 FHS&G) is more cautious: the 'Erasistrateans' say ὡς Θεοφράστῳ συνεγένετο. The information supplied by some late sources, that he lived and worked in Alexandria,³¹ has been rejected by our leading expert on Hellenistic Alexandria and its civilization.³² His work at the Seleucid court in Antioch is acknowledged by all as a historical fact.

What, if anything, was his relation to Theophrastus? συγγίγνομαι is 'to keep company with'—and the object may be πονηροί (DL 6.6), just as well as one's teacher of philosophy (DL 9.38; *Ind. Acad.* 25.6). In another passage, using almost the same words in two different works, Galen casts doubts on the claim of οἱ ἀπ' αὐτοῦ (the 'Erasistrateans' mentioned above), φάσκοντες ὠμιληκῆναι τοῖς ἐκ τοῦ Περιπάτου φιλοσόφοις αὐτόν (*De Fac. Nat.* 2.4, 165.8–10 Helmreich; 2.88 K. = *In Hipp. Alim. Comm.* 3.14, 15.307 K.—where the language is even stronger: ὡς εἴ τις ὀμιλήσειε τοῖς Ἀριστοτέλους καὶ Θεοφράστου γράμμασιν κτλ.: "had he even conversed with their books?"). Galen's reason, in both cases, is that while Erasistratus agrees with the Peripatet-

³⁰ The exact sequence of Zeno's studies, according to DL 7.2 (SVF 1.1) is: Crates the Cynic > Stilpo > Xenocrates > Polemo. Diodorus is added at 7.15, with no chronological indications: Numenius knows of no such thing, in a passage where he does relate Arcesilaus to Diodorus (as contemporary sources did: see Timon and Aristo in DL 4.33, and above, the context of n. 17). The chronological unlikelihood of Zeno's studies with Xenocrates was noted by Max Pohlenz, *Die Stoa* 2, 1956, 14, note on p. 23 line 16. As far as I can find, this statement of Diogenes is not cited or discussed in the editions of the fragments of Xenocrates by Heinze and Isnardi Parente. What is important is that, not only does Diogenes make Polemo the last in the sequence of Zeno's teachers: both Cicero (*Acad.* 1.34–35; *De Fin.* 4.3 = SVF 1.13) and Numenius (Fr. 25 des Places, 4f.) indicate that the quarrel between Arcesilaus and Zeno began when (or soon after?) they were pupils of Polemo.

³¹ For references: Robert Fuchs, *Erasistratea*, diss. Berlin (Leipzig 1892) 13 and n. 28.

³² P. M. Fraser, *Ptolemaic Alexandria*, (Oxford 1972) 1.347; 2.502 n. 45, 503 n. 53.

ics “in principle” that nature is a “craftsman”—big deal!—he does not seem to notice the harmony (which Galen *does* notice!) between their writings and those of the Hippocratics.³³

Fortunately, the precise facts in this dispute, across the generations, between two of the leading physicians of antiquity, need not concern us here. What matters to us is that there were traditions which connected the name of one of the greatest physicians of the third century both with Theophrastus and with Alexandria.

Strato of Lampsacus was a pupil of Theophrastus (18.19 FHS&G), and was invited to Alexandria to be a private tutor to Ptolemy Philadelphus.³⁴ He returned to Athens before 288/5, when he succeeded Theophrastus and became head of the Peripatos for eighteen years.³⁵ We do not know why he decided to return to Athens—especially if there is any substance in Wehrli’s suggestion that he was not Theophrastus’ choice as his successor.³⁶ Perhaps the eighty talents paid him by Ptolemy made it possible for him to live in Athens without the pressures of a royal court: one can only guess. Strato was called—and probably called himself—ὁ φυσικός (Frr. 1; 2; 8; 10; 12; 15; 16 Wehrli), and the catalogue of his works includes—apart from the more traditional philosophical topics—titles related to what we now call biology, anatomy, metallurgy, mechanics, general physics, and astronomy. He could have done well following his researches in Alexandria. It is not impossible that the “trade-name” ὁ φυσικός was attached to him against the Athenian background, where such people—even in the Peripatos—were beginning to look somewhat eccentric.

More symptomatic, perhaps, of the philosophical and intellectual atmosphere in mid-third century Athens was the period of residence there of a man who did, at the end, leave for Alexandria and became one of its leading lights: Eratosthenes of Cyrene. Eratosthenes spent about twenty years of his life in Athens as a pupil, among others, of the ‘renegade’

³³ Fuchs 1892, 11 and nn. 14–18, presents the evidence of Diogenes and Galen, and tends to accept Galen’s view. But Galen may be suspected of malice here. Wehrli (n. 5), vol. V, ²1969, 249 (comment on Strato, Fr. 17) traces a possible influence of Strato of Lampsacus on Erasistratus.

³⁴ καθηγησάτο: DL 5.58 and *Suda* Σ 1185 (= Frr. 1–2 Wehrli). On καθηγητής and cognates used for private tutors, see *Antiochus* (above, n. 4) 127–34; 424f.

³⁵ See the comments of Wehrli (above, n. 5) 5.47–48 (commentary on Frr. 1–2).

³⁶ *Ibid.* 48, on Frr. 4–7.

Stoic Aristo of Chius and the Academic Arcesilaus, and he heard the last lectures of Zeno of Citium.³⁷ He was critical of Aristo, of Bion, and probably also of Zeno.³⁸ We do not know what his attitude to Arcesilaus was. In 245, he was invited by Ptolemy Euergetes to become librarian at Alexandria, and there he spent the rest of his life—over forty years. He may have written some of his mathematical work while still in Athens; but much of his work in chronology, geography, astronomy and poetry was accomplished in Alexandria. Eratosthenes had good reasons to leave Athens for the prestigious post offered him by Ptolemy. He was a native of Cyrene, where he had grown up under Ptolemaic rule; and the conditions for study and research for a holder of the new post were unrivalled at the time. But his criticisms of some of his contemporary Athenian philosophers may also point to some disappointment with the Athenian intellectual scene. He was clearly critical of ‘main line’ Stoics (T 10, 19–22 Jacoby), but also of the ‘heretic’ Aristo (T 17 Jacoby). Unlike Strato, he never returned to Athens.

Eratosthenes earned his chief reputation in antiquity as a geographer. In some of his geographical work, he was influenced by the work of Aristotle’s pupil Dicaearchus of Messene.³⁹ But Dicaearchus spent most of his time in the Peloponnese. He was born around 342/41.⁴⁰ When Eratosthenes came to Athens around 265, Dicaearchus, if still alive and living in Athens, must have been very old. The study of geography, as is well known, was begun by the logographers and some of the first philosophers in Ionia, and developed, to some extent, by Aristotle’s pupils Dicaearchus, Heraclides Ponticus and Strato. But geography as we know it was first practised in Alexandria by Eratosthenes.

Biography and the study of literature and literary history were also developed into a proper area of research by the early Peripatetics.⁴¹ But

³⁷ *Testimonia* for Eratosthenes’ life: Jacoby *FGrH* 241 (II B, 1010–12). A detailed discussion of the evidence for his Athenian *Lehrjahre* (with much of the *testimonia* cited in the notes): P. M. Fraser, *Eratosthenes of Cyrene, Proceedings of the British Academy* (1970) 3–4; 6–9.

J. P. Lynch (1972, 143), seems to emphasize that Eratosthenes does not appear to have studied at the Peripatos. But he came to Athens around 265. Could one expect him to have been attracted by Lyco?

³⁸ Fraser 1970, 7–8.

³⁹ Wehrli (n. 5) vol. 1, 1967, 75–80 (commentary on Dicaearchus *Frr.* 104–15).

⁴⁰ *Ibid.*, comm. on *Frr.* 1–4, p. 43.

⁴¹ For a brief summary, with references to titles and fragments: Wehrli (above, n.

from the end of the third century onwards a number of Alexandrians who wrote books of biography, 'haeresiography', 'diadochography' and plain literary history were called Peripatetics, although no connection with the Athenian school is attested.⁴²

We can now begin to draw the threads together.

Aristotle and his immediate colleagues and disciples introduced into Athens—and into the world—a new conception of what it is to engage in philosophy. They not only combined the Ionian heritage of the study of nature with the Eleatic legacy of dialectic and what we now call metaphysics, and with the legacy of the Sophists and the Socratics, ethics, politics, rhetoric, literature. For the first time, the study of all these fields was undertaken by one group of people working together, each in the fields of his special interests; and for the first time, study and research in these fields—including politics and literature—was based on the collection and classification of a vast number of objects, documents and facts, as the basis for any theoretical conclusions. In many ways, Aristotle's school was the precursor of our modern university. There had been nothing like this before, in Athens or elsewhere. Plato's Academy, also a group of scholars and students working together, was limited to 'pure' philosophy and the mathematical disciplines (including astronomy), and rejected the study of nature, history and literature.

Theophrastus, Eudemus, Dicaearchus (mostly *in absentia*) and some of their colleagues attempted to carry on this study and research in all fields of knowledge; but soon, the 'empirical' study of nature, literature and history moved to Alexandria, where the new discipline of philology was added to them. Athens began to lag behind in these fields, and the 'Peripatetic programme' came to fulfilment in Alexandria. Fraser has summed it up speaking of the "unmistakable links with those traditions of the Lyceum which account for the nature and trend of much of the

5), 10.93–128: *Rückblick: Der Peripatos in vorchristlicher Zeit*, esp. 121–26. Arnaldo Momigliano, *The Development of Greek Biography* (Cambridge, Mass., 1971) 64–100, has argued that, since the first attested practitioner of 'proper' biography was the 'eccentric' Aristoxenus, one should be wary of using the expression 'Peripatetic biography'. Certainly, if what we mean is the Peripatos in Athens. But Momigliano himself (79) recalls that "both Hermippus and Sotion are called Peripatetics. In some sense, they must have been followers of Aristotle." Not necessarily: now read on.

⁴² Lynch 1972, 136–38, with references to earlier literature; Fraser (above, n. 32) 1.320; 2.474 n. 102.

intellectual life of Alexandria, with its emphasis on the collection and comparison of material rather than on abstract philosophy in the tradition of the Academy, and which at a later date led to the use of the word 'Peripatetic' as equivalent to 'Alexandrian'."⁴³

What caused this migration of the Peripatetic ideal of research from Athens to Alexandria is a subject which deserves more detailed study. Clearly, the royal patronage which enabled Aristotle to assemble so many materials was beginning to run dry even by the time of Theophrastus; and the huge resources invested by the Ptolemies in the Museum and the Library would attract many a man with interests similar to those of Eratosthenes to the prosperous new city. Even a 'book-learned' geographer or chronologist would find no rival in Athens to the great Alexandrian Library. But was all this already clear at the time of Arcesilaus and Zeno, when the new Alexandrian institutions had not yet won their reputation, and when the school of Theophrastus still seemed to be flourishing?

Much has been made of the 'metic character' of the Peripatos as one of the causes of its decline.⁴⁴ But if 'xenophobia' was a factor, what about Xenocrates of Chalcedon (well: he was virtually an honorary Athenian—but); Arcesilaus of Pitane, Lacydes of Cyrene, Telecles and Evander of Phocis, Carneades of Cyrene, Hasdrubal the Carthaginian (Clitomachus), and Philo of Larisa in the Academy, and a whole line of metics in the Stoa until we reach Mnesarchus and Dardanus at the end of the second century?

I suggest another reason. Zeno and Arcesilaus may well symbolize the withdrawing of Athenian philosophy, from the new ideals of Aristotle and Theophrastus, into itself and its Socratic and Platonic past. The study of nature had never been the strongest point of Athenian philosophy. Whatever historical truth there may be in Plato's story in *Phaedo* of Socrates' turning away from natural philosophy to the philosophy of man, this is the Socrates we know—and the Socrates Zeno and Arcesilaus knew—from the writings of Plato and Xenophon. Both Arcesilaus and Zeno turned away from the 'modern' fashions of their time to 'the living dead' of Plato's Academy. One of the few things we know of Polemo's Academy is its emphasis on philosophy as a way of

⁴³ Fraser 1972, 1.320.

⁴⁴ Most recently: Lynch 1972, 152–54.

life rather than a set of futile and clever theoretical exercises (DL 4.18), and on friendship, including homosexual love, as part of the life of the community (e.g. DL 4.21; 24). The Cynics, too, emphasized the role of philosophy as a way of life: indeed, for them, this was the whole of philosophy. They probably did not satisfy the cravings of Zeno and Arcesilaus for proper intellectual activity and for life in a community of philosophers. The Cynics attracted people like Metrocles and Bion, who did search for a philosophical life rather than ‘book-knowledge’. Those interested in dialectic were attracted to Stilpo and Diodorus—and our sources tell us that Zeno and Arcesilaus spent some time with one or the other of those two. But they ended up in the Academy, as representing the most genuine old Athenian brand of philosophy, that of Socrates and Plato. Arcesilaus, when he became head of the Academy, returned the school to the traditions of Socrates and Plato as he interpreted them. Zeno founded a new school of thought, but much of it is still, in many ways, a continuation of the Socratic and Platonic tradition. What matters are the fields of inquiry they concentrated on: apart from the relatively new fashions in dialectic (which was, in principle, at least as old as the Sophists and Socrates)—epistemology and ethics. Even when the Stoics indulged in Physics, they did not pursue ‘empirical’ research in the sense of Aristotle and Theophrastus: in the best case (as we see, for example, in Book 2 of *De Natura Deorum*), they drew on the ‘empirical’ findings of others to prove their more general ‘metaphysical and cosmological’ points. Athenian philosophy returned to what, even today, is still regarded as philosophy in the strict sense; and the achievements of Stoics, Academics and Epicureans in logic, epistemology, ethics and the general view of the world are still of interest to us today. Athens gave up the ideal of science and research of the early Peripatos, and this was taken over by Alexandria. At the same time, no Alexandrian scholar or scientist, until the Roman period, made any lasting contribution to philosophy in its strict—and Athenian—sense.⁴⁵ Students from the “provinces” had to choose, for some time, between ‘Alexandria for science and philology’ and ‘Athens for philosophy’. But this is already λόγος ἕτερος.

⁴⁵ Fraser 1972, 1, ch. 9, “Alexandrian Philosophy,” 480–94, sums up this situation.

Appendix

Alfons Weische, *Cicero und die neue Akademie*,
Münster 1961.

This book presents the largest claim—the only serious claim that I know of—for a Peripatetic, and Theophrastean, source of Arcesilaus' scepticism, and his philosophy in general. Much of it has been refuted in detail by Hans-Joachim Krämer, *Platonismus und hellenistische Philosophie* (Berlin and New York 1971) 11–13. Even a largely sympathetic reviewer—A. D. Leeman, *Mnemosyne* 16 (1963) 199–201—ends on a sceptical note. The last two sentences of Leeman's review are so relevant to the issues discussed in this article, that I shall quote them in full:

“Wenn tatsächlich Arkesilaos im Peripatos soviel Anregung und Anklang gefunden hat, bleibt es doch schwer verständlich, warum er zur Akademie und damit zur platonischen Tradition übergegangen ist. Überdies hören wir nichts von einer regen neuakademischen wissenschaftlichen Tätigkeit im Sinne Theophrasts und seiner Nachfolger, wie es doch bei einer hohen Bewertung der positiven Wissenschaften zu erwarten wäre.”

One of Weische's central points, where he believes that the sources support his position, is the connection made by Cicero himself—a reliable Academic source—between the Peripatetic and the Academic practice *in utramque partem disserendi*. This point has not been sufficiently dealt with by Krämer. Weische (73–82) cites, among other passages of Cicero, *De Fin.* 5.10; *Tusc. Disp.* 2.9, and *Acad. I.* 1.45. But at *De Fin.* 5.10 (even in the sentences quoted by Weische), Cicero expressly distinguishes between the Peripatetic practice and that of Arcesilaus (and the speaker, Piso, represents Antiochus, who would have been only too happy if he could point out that this practice, central to Arcesilaus' way of doing philosophy, was stolen by him from the *antiqui*. See Piso's accusation of plagiarism, in ethics, by all and sundry, from Aristotle and Theophrastus: *Fin.* 5.72–74). *Tusc.* 2.9 is not explicit, but Cicero's first reason for the use of this practice, *quod aliter non posset, quid in quaque re veri simile esset, inveniri*, is clearly Academic and Carneadean. (On *probabile*, *veri simile*, their origin and their development within the Academy, see my article 'Probabile, Veri Simile, and Related Terms,' in J. G. F. Powell (ed.), *Cicero the Philosopher* [Ox-

ford, 1995] 115–43.) At *Acad. I*, 1.45, the practice is ascribed solely to Arcesilaus, in words reminiscent of *Tusc. Disp.* 1.8; 5.11; *De Nat. Deor.* 1.11. In all these passages, Arcesilaus' source for this practice was the Socratic tradition, which he 'renewed'. Cicero was aware of the existence of this practice in the early Peripatos; but he makes a clear distinction between the rhetorical nature it had there, and the 'Socratic' nature of searching for the truth which it had in the Academy.

15

Theophrastus, the Academy, Antiochus and Cicero: A Response (to John Glucker) and an Appendix

Woldemar Görler

John Glucker has done the impossible. He has given us a splendid paper on something that we suspected, and he knew, was hardly a subject at all. The influence of Theophrastus on the school of Plato is negligible. True, Arcesilaus, the first “sceptical” Academic, had been among Theophrastus’ students, and—pace Glucker—I am still inclined to think that this is when he became familiar with the practice of arguing on both sides of a question. But he left his first philosophy teacher fairly soon in order to join Polemo’s Academy. Theophrastus was not amused; the less so, as Arcesilaus obviously was motivated at least in part by reasons of a non-philosophical nature.

This is the end of the story, and it could have been the end of Glucker’s paper. The secret of his fascinating continuation beyond this factual limit is partly given away in the subtitle he has elegantly added to his subject heading proper. To comment upon “the Athenian philosophical atmosphere” might on the face of it look like escaping to a substitute theme because so little was to be said about the original topic.

But it soon becomes clear that, in talking about the intellectual atmosphere of Hellenistic Athens, Glucker is furnishing a highly attractive explanation of just why there was so little to be said about Theophrastus and the Academy: the "Peripatetic ideal of research," represented most notably by Theophrastus, was fated to migrate to Alexandria, whereas philosophy "in the strict sense," i.e. the current representatives of "the genuine old Athenian brand of philosophy, that of Socrates and Plato," continued to flourish in Athens (313–15 above). This is important, new, illuminating, and convincing.

Glucker has also advanced some strong arguments to the effect that there was, in early third-century Athens, a propensity to glorify the great philosophers of a past generation.

In the main, this is undoubtedly true. It is only with respect to details and to degrees of emphasis that some minor qualms arise. In Glucker's description of the "Athenian atmosphere," two philosophers figure prominently: Zeno, the first Stoic, and Arcesilaus, the first "sceptical" Academic. Glucker repeatedly mentions them as a pair, and he tells us why: both were searching for what had survived of a greater philosophical past, for "the living dead." That is why both of them ended up in the Academy, then directed by Polemo.¹ The wording is not strictly accurate: the Academy was of course no more than a station in the philosophical career of Zeno; and when Arcesilaus succeeded to the scholarchate he changed the character of the Academy radically. Still, it is true that both of them did for a time study with Polemo, and the parallel is conspicuous. It was, as no one need tell John Glucker, stressed around two centuries later by Antiochus of Ascalon. He, dissatisfied with the philosophy of his own time and notably with the Academy as headed by Philo of Larisa, felt increasingly enthusiastic about the glorious past and tried to re-establish what he regarded as the doctrines of the old philosophers, including Socrates, Plato, Aristotle, and the early Academics down to Polemo and Crantor.² This tradition is broken off with Polemo's most famous students: Zeno founded a school of his own, Arcesilaus "defected" to scepticism. And yet both of them pretended to preserve the venerable heritage faithfully; in this respect Antiochus considers them as rivals. There is a detailed "syncretism," partly preserved, in Cicero's *Second Academics*, introduced thus (*Acad.* 1.34f.): ... *iam*

¹ Glucker, 308–9 above.

² Cf. 326 below.

Polemonem audierant (...) Zeno et Arcesilas (...). It is probably by inference from this and similar passages that later authors think of Zeno and Arcesilaus as συσχολασταί and συμφοιτῶντες (Strabo 13.1.67 and Numenius Fr. 25 Des Places = Fr. 2 Leemans in Eusebius *Praep. evang.* 14.5.11f., respectively). But this is impossible: when Zeno left the Academy and founded his own school (c. 300 B.C.), Arcesilaus was only about 15 years old, and presumably still at Pitane. So in reality they were not precisely a pair. Could it be that, under the influence of Antiochus, the legendary features in their respective biographies, so impressively presented by Gucker, have been remodelled so as to match each other? It is certainly very much in Antiochus' spirit that both are portrayed as admirers of the "living dead." One might object that Arcesilaus' *mot* praising Polemo's crowd as "relics of the Golden Age" is attested both in the *Academicorum Index* and in Diogenes Laertius, and will therefore have been cited already in Antigonos of Carystus. But it is not altogether certain that whatever we read both in the *Index* and in Diogenes must have been taken from Antigonos.

On the other hand, some doubts emerge as to the interpretation of the stories discussed by Gucker and how they match with each other. Zeno is told by the oracle that he should "have contact with the dead." Let us grant that Hecato and Apollonius of Tyre, who referred this to books, were wrong, and that Gucker, who refers it to live philosophers "of the good old brand," is right. Zeno, then, is ordered to search for such persons. There is no previous order of the kind in Arcesilaus' story: he has already left Theophrastus and joined the Academy, whatever his reasons may have been, and it is only then that he is struck by—well, by what? by the philosophical doctrines of his new friends? This hardly fits in with the notion of the Golden Age. Something like a personal aura must be meant, some charisma—which could of course include their doctrines and their way of life. But I do not see any compelling reason not to take Arcesilaus' eulogy as referring to outward appearance alone. There are after all clearly erotic allusions in our story, and humans of the Golden Age will surely have been very good-looking indeed.

Zeno in the bookshop.³ This anecdote harmonizes with what we have

³ Gucker, 308 above.—It is as good as certain that the anecdote had been reported by Zeno himself in his Ἀπομνημονεύματα Κράτητος ἠθικά (DL 7.4 = SVF 1.41). In the same (?) book there was a similar story, taken up by Teles (Stob. 4.32.21 = SVF 1.273): Crates, while waiting to have his shoes sewn, reads Aristotle's *Protrepticus*; he

learnt about Zeno reading Socratic books ἔτι παῖς ὢν: as a book-lover of long standing it would have been natural for him when he, aged about 30, had shipwrecked near Piraeus and walked up to Athens, to call on a βιβλιοπώλης. But he had already had philosophical books at Citium: so why not ask this bookseller where to find philosophers in the flesh? This could be the plain meaning of τοιοῦτοι ἄνδρες. Gucker takes it as “men like those in the past.” This interpretation is of course equally possible, the more so as the book read—aloud!—by the bookseller is about the past (it is book II of Xenophon’s *Memorabilia*), and τοιοῦτοι may bear a strongly positive connotation, as does Arcesilaus’ ἀρχαῖοι ἐκεῖνοι (*Ind. Acad.* 15.8). At first sight, the oracle story seems to favour Gucker’s interpretation: Zeno had been ordered “to have contact with the dead,” so could he not be trying to do just this when making inquiries with the bookseller? Yet the two stories are hardly compatible. Both of them express and picture what may be called Zeno’s ‘vocation to philosophy’; each of them does so in its own way, and cannot easily be conceived as succeeding the other.⁴ And what is more: it is not a philosopher of old times, not one of the ‘living dead,’ who happens to pass by the bookshop, it is Crates the Cynic, a very much alive and contemporary type of person. It would have been different had this been the Academic Polemo.

These are minor criticisms, delivered more dutifully than confidently as invited comments. They hardly detract from what Gucker has taught us: that there was intellectual nostalgia and a deep-seated regard for the “old and genuine” philosophers in early third-century Athens, feelings that go a long way towards explaining why Theophrastus, who represented a more “modern” type of philosophical inquiry, often carried out as team work, did not leave a lasting imprint on Arcesilaus or his Academy.⁵

A more substantial point of disagreement has been mentioned in pass-

is overheard by the cobbler and makes him the addressee of what he reads. Both stories differ widely, in mood and spirit, from the oracle scene.

⁴ O. Gigon, “Antike Erzählungen über die Berufung zur Philosophie,” *MH* 3 (1946) 1–21, esp. 20: “die (...) Orakelgeschichte [wirkt] sachlich wie eine enkomiasische Bearbeitung des Vorliegenden” (i.e. of the story of the bookshop).

⁵ Note, however, that research for purposes of classification was not totally unheard of in the Academy: see DL 1.40 and 8.21 on Damon and Aristippus of Cyrene. For more details see Ueberweg, *Antike* 4, at 797, 820, 837f. and 877f.

ing above. In his appendix devoted to Weische's monograph,⁶ Gucker firmly denies any influence of Theophrastus, and of the Peripatetics in general, on Arcesilaus' well-known method of arguing "against all other opinions." I disagree, and the best way to make my point is to call to witness Gucker himself in a famous footnote he wrote more than 15 years ago:⁷

"... we have the evidence of Cicero (*Fin.* 5.10, *Tusc.* 2.9, *Or.* 46) that Aristotle was the inventor of the technique *in utramque partem disserendi*, and the evidence of Cicero *De or.* 3.67 and D.L. 4.28 = *Acad. Ind.* 18.7–12 (...) that Arcesilaus was the first to introduce that practice into the Academy. (...) If Cicero's Academic tradition admits that this practice was borrowed from Aristotle's school, this is surely because it was."

Gucker now tries to play down most of the passages in which Peripatetics and Academics are mentioned side by side as using the method.⁸ In this he hardly succeeds. *Tusc. Disp.* 2.9 is—pace Gucker 1993⁹—quite "explicit": the two schools are referred to as a nearly homogeneous group, and there is no reason to assume that the *consuetudo* common to both schools was practised by the Academics only "to find the probable," and by the Peripatetics only for rhetorical training.

Nor can I accept Gucker's argument concerning *De Fin.* 5.10. The speaker is an Antiochean in Peripatetic disguise (on which more below); so he feels uneasy about the undeniable fact that Arcesilaus' destructive method is common to both schools. Understandably, he does not "point out that this practice (...) was 'stolen' from the *antiqui*"¹⁰—this would turn the *antiqui* themselves into sceptics. What he says seems impartial and, as I take it, very near to the truth: "Aristotle was the first to use the method; Arcesilaus, later, did the same, but he distorted the idea by always arguing against the affirmations of others" (and therefore destructively—an abominable aberration, in Antiochus' view). That there is no mention of either Aristotle or the Peripatetic school in *Acad.* 1.45, *Tusc.*

⁶ Gucker, 315–16 above.

⁷ J. Gucker, *Antiochus and the Late Academy* (Göttingen 1978) 33–35 n. 79 (in the main an argument with H. J. Krämer).—Johannes M. van Ophuijsen, *RUSCH* 6 (1994) 149–57, has adduced massive evidence from Cicero, Diogenes Laertius, and Alexander of Aphrodisias which makes it quite clear that the practice of *in utramque partem disserere* stems in the main from the early Peripatos or indeed from Aristotle himself.

⁸ Add *De Oratore* 3.107 (referring back to 3.67).

⁹ 315 above.

¹⁰ Gucker, 315 above.

Disp. 1.8, 5.11, *De Nat. Deor.* 1.11 is no decisive proof: why should a sceptical Academic refer to Aristotle anyway? Note that Plato and the early Academy are not mentioned either; what is referred to is the "Socratic tradition," and neither Arcesilaus nor his followers ever denied that Aristotle and his followers were part of this tradition. Glucker's conclusion of 1978 still holds good:

"... had Arcesilaus derived this practice from the early Academy, he would surely have staked a claim for the Academic ancestry of this dialectical technique, and such a claim would have been transmitted to Cicero by his Academic sources."

Of course it does not follow from this that we should side with Weische. Academic scepticism does not originate with the school of Aristotle. Arcesilaus' innovations were thoroughgoing; only to a limited extent can they be explained by pointing to philosophical "models" and "precursors." The Peripatetic method of arguing εἰς ἑκάτερον has a solid claim to be considered as one formal model—no more, no less. As a student of Theophrastus, Arcesilaus must have witnessed, even practised it. Why should he, later on, have dropped a practice as helpful and indeed "central to [his] way of doing philosophy"?¹¹

One topic remains to be discussed. John Glucker has passed it over—rightly, I submit, since it is no more than a chimera. Yet it is a remarkably persistent one, raising its head in these Theophrastean volumes with disquieting frequency.¹² In the present volume, Tony Long casts some doubt on the myth I am referring to.¹³ But I fear this will not be sufficient; so let us join forces and lay this ghost for good.

Here is where the illusion originates. In the introductory part of his speech in *De finibus* V, M. Pupius Piso pronounces (*De Fin.* 5.12): ... *Theophrastum ... adhibeamus ad pleraque*. If this were the whole truth, we would have to understand—although with some misgivings—that Piso "had employed Theophrastus for most sections" of his exposition of Peripatetic ethics. Acknowledgments to sources are at a premium in Cicero, so some scholars could not withstand the temptation to take what appeared to be one at face value, and inferred that the bulk of *De*

¹¹ Glucker, 315 above.

¹² Gigon, *RUSCH* 3 (1988) 263–69, 4 (1989) 165–85; Steinmetz, *RUSCH* 4 (1989) 19; Görler, *RUSCH* 4 (1989) 248, 259f. nn. 8–9.

¹³ Cf. below, 358–59.

finibus V is Theophrastean in substance. Olof Gigon went further: seeing that Theophrastus' *De vita beata* is mentioned in the final discussion of the book (*De Fin.* 5.85), he identified this work as Cicero's source.

However, things are not as simple and straightforward as this—and Gigon, currently the most fervent supporter of the thesis of a Theophrastean origin, is aware of this. Piso's philosophical position in *De finibus* V is unmistakably characterized as Antiochean (*De Fin.* 5.8 and 75). This gives us two competing indications of a "source." They are not outright incompatible: Antiochus was in the habit of presenting his own view as that of the "ancient philosophers," i.e. of "the older Academics" down to Crantor and of "the older Peripatetics."¹⁴ Since Theophrastus belongs prominently to the latter set, it is not by itself inconceivable that Antiochus might have used him as his mask or his mouthpiece. What is hard to understand is why someone who was a philosopher in his own right, should have incorporated large parts of a book by a previous thinker into one of his own. What is even more difficult is to find any common ground between Piso's speech in *De finibus* and what we know of Theophrastus *Περὶ εὐδαιμονίας*. Theophrastus' book was ill-famed for what was regarded as its "weakness": Aristotle's successor here not only conceded that external and physical advantages are genuine 'goods' (*ἀγαθά*, *bona*), but also that it made a considerable difference whether we have them or not. Piso's argument in *De finibus* V amounts to almost the contrary.

In fact, when Piso mentions Theophrastus' book (*De Fin.* 5.85), this is far from being an indication of a source: understood properly, taking into account its context, it furnishes clear proof that *Περὶ εὐδαιμονίας* has *not* been used. Piso had adduced striking similes to prove that the presence or absence of external and bodily goods is of negligible consequence compared to the infinitely superior power of virtue. Cicero declares himself not yet convinced and sides with the Stoics, praising their uncompromising consistency. Now Theophrastus' view could in its way be considered just as consistent. So Piso, slightly nettled, tries to provoke Cicero, the advocate of consistency, by asking "Does that mean you approve of Theophrastus' *De vita beata*?" i.e. "Would you prefer his position instead?" This only makes sense on the supposition that Piso (representing Antiochus) had kept a distance from Theophrastus

¹⁴ For details see Ueberweg, *Antike* 4, 947–49.

throughout his speech—which renders it next to impossible that he had used *De vita beata* as his source.¹⁵

To overcome these obstacles Gigon resorts to a complex hypothesis.¹⁶ He is well aware that Antiochus must have realised that Theophrastus was the least suitable candidate to act as his mouthpiece: Antiochus was anxious to establish that, in ethical matters, Peripatetics and Stoics held almost identical views, whereas Theophrastus, being “weaker” than most Peripatetics, was particularly far removed from Stoic rigorism. Gigon’s suggestion is that it was the Academic Carneades who had first chosen Theophrastus’ ill-reputed book “to play off the Peripatos against the Stoa”; Antiochus allegedly adopted this “configuration” but changed its purport, since he for his part was eager to prove the Peripatetics and Stoics closely related in doctrine. On this hypothesis Piso’s speech would be, after Theophrastus himself, Carneades, and Antiochus, the fourth version (or the third transformation) of *Περὶ εὐδαιμονίας*.

This hypothesis is not just implausible in the extreme: it is demonstrably false. Carneades, so far as we know, never tried to contrast Peripatetics and Stoics *in ethicis*. Quite on the contrary, it is well attested that he too assimilated the two schools, just as Antiochus did later on: Cicero *De Fin.* 3.41 *Carneades ... pugnare non destitit in omni hac quaestione, quae de bonis et malis appelletur*,¹⁷ *non esse rerum Stoicis cum Peripateticis controversiam, sed nominum; Disp. Tusc.* 5.120 (Carneades) *cum quaecumque bona Peripateticis eadem Stoicis commoda viderentur (...) cum ea re, non verbis ponderarentur, causam esse dissidendi negabat*. So Carneades is ruled out and we are left with the question, why Antiochus should have “employed” Theophrastus—of all possible candidates—“for the greater part” of a book, still unanswered.

Let me try to offer a simpler explanation. First I would suggest that whatever Piso says on the subject is in fact based on books, or ideas, of Antiochus of Ascalon, but not all of it on one and the same book. It is only in Piso’s continuous account (*De Fin.* 5.24–74) that one single treatise has been followed; the preceding sections are of a different origin, and have been arranged as they stand by none other than Cicero.

¹⁵ This, of course, is not to deny that there is an isolated verbatim quotation from the introduction to the book in *De Fin.* 5.86 (475 FHS&G).

¹⁶ RUSCH 4 (1989) 160–66.

¹⁷ The subjunctive is odd. See Madvig *ad loc.*

Certain linguistic details are revealing. At the outset (*De Fin.* 5.8) Piso's task is defined rather vaguely: *studet ... meus audire Cicero* (Lucius Cicero, Marcus' cousin), *quaenam sit ... veteris (...) Academiae de finibus bonorum Peripateticorumque sententia*; and shortly after this Cicero addresses Brutus, the dedicatee of *De finibus*: ... *attende, quaeso, ... satisne videatur (Pisonis oratio) Antiochi complexa esse sententiam*. Cicero's aim, then, in *De finibus* V, is not primarily to render faithfully one book by Antiochus, but "sufficiently to embrace (*complecti*) Antiochus' philosophical position (*sententia*)."¹⁸ There is a connotation of 'bringing (and holding) together': Cicero makes Piso give as comprehensive a synopsis as possible.

Piso prefaces his account with a series of miscellaneous topics (9–11): the Peripatetic school and its merits in general; physics, dialectic, ethics—note that Theophrastus is mentioned, approvingly, twice. The details are historically correct and rather conventional. What is striking is that all attention seems focused on the Peripatetics, the Academy being passed over in silence. But this neglect can be explained. The setting of *De finibus* V is largely autobiographical. There is no reason to doubt that Piso did in fact pursue philosophical studies at Athens in 79 B.C., and if so, Piso and Cicero are likely to have actually engaged in philosophical conversation.¹⁸ Cicero, when composing *De finibus*, must have counted it a fortunate coincidence that he was able to introduce an historically authentic speaker whose philosophical competence, moreover, was beyond doubt.¹⁹ Now Piso was known as a Peripatetic, not an Antiochean. Cicero therefore had to compromise—and here is my second suggestion: he did so by calling Antiochus' doctrine "Peripatetic." This was not a serious distortion. Antiochus' ethical system is indeed, to a certain extent, compatible with Peripatetic tenets. There is some disagreement as to the rating of "external" and "bodily" goods, but just this difference is brought home towards the end of the book with all the clarity one could desire: Cicero pretends to be surprised at the "firmness" of the doctrines Piso has expounded (75); "to the best of his memory the Peripatetics attached greater importance to *bona aut mala*

¹⁸ They knew each other well: Asconius Pedianus on Cic. Pis. 62: *fuit (...) Pupius Piso eisdem temporibus quibus Cicero, sed tanto aetate maior, ut adolescentulum Ciceronem pater ad eum deduceret, quod in eo et antiquae vitae similitudo et multae erant litterae.*

¹⁹ Contrast e.g. L. Licinius Lucullus: Cic. Luc. 4 and 63, Att. 13.16.1; see also Fam. 9.8.1.

corporis" Prompted by this remark Piso as it were throws off his Peripatetic mask and explains that what he has presented is in fact the doctrine of Antiochus: *est ut dicis ...; sed haec ab Antiocho ... dicuntur multo melius et fortius quam a Stasea* (Piso's Peripatetic teacher) *dicebantur*. Piso's confession is at the same time a hint at Cicero's source, which has its counterpart, as we have seen, in section 8 (*Antiochi sententia* as the general topic of Piso's speech), and thus yields a kind of frame. It leaves no serious doubt that what Piso expounds is, at the core, Antiochean material. Not surprisingly, there are no allusions to Aristotle's school in the central part (24–74).

But the Peripatetics do figure prominently in the prelude and the final discussion. In section 7, Piso declares that he will try to bring Lucius over from "this new Academy here" (*haec nova Academia*, represented in this dialogue by Marcus Cicero) to "yonder old one" (*vetus illa*), which "contained as its members not only Academics proper—Speusippus, Xenocrates, Polemo, Crantor, and all the rest—but also the old Peripatetics and their foremost representative, Aristotle."

So far, the "old Academy" has been defined on characteristically Antiochean lines. Yet in what follows, the Academics proper gradually fade out. In his first eulogy of the "ancient" philosophers (section 7), Piso still (if the syntax is to be trusted) speaks of both schools. But when he refers back to this in section 9, he argues as if he had mentioned the Peripatetics alone; and his second eulogy (sections 9–11), as we have seen, is entirely focused on that school. The keynote of his praise is echoed in his peroration: compare 7 *ab his oratores, ab his imperatores ac rerum publicarum principes extiterunt ... mathematici, poetae, musici, medici denique (...) profecti sunt*, with 74 *relinquitur sola haec disciplina digna studiosis ingenuarum artium, digna eruditis, digna claris viris, digna principibus, digna regibus*. In section 7, Piso stresses that "no one could proceed to higher aims unless equipped by the old philosophers" (*sine eo instrumento*). The simile is taken up by Quintus Cicero at the very end of the dialogue (96): *... laetor ... eam philosophiam, cuius antea supellectilem pluris aestimabam quam possessiones reliquarum, ... etiam acutiorem repertam quam ceteras, quod quidam ei deesse dicebant*. Quintus does not mention the Peripatetics by name, but there can be no doubt as to the preference expressed

here.²⁰ All in all, the Peripatetic “disguise” constitutes a second (outer) “frame.”

Quintus’ philosophical leanings may, indeed, have provided one more motive for Marcus Cicero’s labeling Antiochus’ ethics as “Peripatetic”; and a third one, in addition to the Peripatetic inclinations of the two interlocutors, can be conjectured: Cicero may have hesitated to introduce the doctrine of Antiochus as “Academic.” The Academy as understood by Cicero, was represented in *De finibus* by Cicero himself. True, he could have distinguished his own “new” (sceptical) Academy from Antiochus’ “old” Academy—as he had done in the *Academica*. But his teacher Philo, in his quarrels with Antiochus, had consistently maintained that there was but one Academy, and that he, the sceptic, was its legitimate representative. Perhaps it was along the same lines of orthodoxy that Cicero decided to call Antiochus’ ethics by the name of a more illustrious school whose teaching was closely akin in substance—and which had so far been somewhat neglected in his dialogues.

To sum up: Cicero had more or less sound reasons for calling Antiochus’ system “Peripatetic,” and he has taken some trouble to do so in the conversational sections of *De finibus* V preceding and following the central speech. But the Peripatetic tinge is confined to this framework; and since this is undoubtedly Cicero’s own invention, this labeling ought not to be taken as an indication of a Greek “source.” It does not detract from the fact that all that Piso has to say on the subject, including his eulogies of Aristotle’s school, is presumably based on Antiochean material. It will be remembered that there are two clear references to Antiochus (*De Fin.* 5.8 and 75), one before and one after Piso’s exposition. These are to be trusted. Cicero’s appeal to Brutus (*De Fin.* 5.8) to pass judgment on what Piso is going to say comes near to being a warrant of authenticity: Brutus was in a position to respond to the appeal, and Cicero would not risk making a fool of himself.

It cannot have been difficult for Cicero to find passages in Antiochus suitable to the quasi-Peripatetic framework he had decided to add as a foil to the central part: Antiochus is likely to have praised the Peripatet-

²⁰ Cf. *Div.* 2.100 (Quintus speaking): *haec me Peripateticorum ratio magis movebat et veteris Dicaearchi et eius, qui nunc floret, Cratippi.*

ics in the key of sections 9–11 more than once. Sections 12–14 are different in character, and probably taken from a different context: here “good” Peripatetics are set off against “degenerate” ones. Distinctions of this kind form a leitmotif in Antiochus: compare Cicero *Academica* 1.33–35, where a similar verdict is pronounced on all Peripatetics after Theophrastus and where, correspondingly, all “new” Academics from Arcesilaus onwards are implicitly charged with deviancy and betrayal. Theophrastus is on the borderline: on the one hand he gets high marks for his style and his character (*Acad.* 1.33) and is not excluded altogether (*De Fin.* 5.12 *tamen adhibeamus ad pleraque*), on the other hand he is censured sharply for his “weakness”: “He robbed virtue of her beauty and weakened her strength by denying that the happy life rests upon her alone” (*Acad.* 1.33; Rackham’s translation slightly modified); “in Theophrastus’ book *De vita beata* much power is conceded to chance,” “and if so, wisdom by itself can hardly guarantee happiness,” an effeminate attitude, “incompatible with Virtue’s force and dignity” (*De Fin.* 5.12). The close analogy leaves no doubt that the thought is Antiochean, and this comes as no surprise: Antiochus incessantly appealed to the “old” Academics and Peripatetics, so he must have felt an obligation to explain the distinction of ‘good old’ and ‘new’ philosophy, and to tell his followers when and why degeneration set in. He is likely to have repeatedly qualified Theophrastus as an ambiguous case, and in order to express this he may have coined the fateful phrase with which we began (*De Fin.* 5.12): ‘In spite of Theophrastus’ weakness as to the self-sufficiency of virtue, he should be ‘admitted’²¹ for most other points and problems,’ ... *tamen adhibeamus ad pleraque*. After Theophrastus, all Peripatetics are on the downgrade. Piso winds up (*De Fin.* 5.14) with the verdict *antiquorum (...) sententiam Antiochus noster mihi videtur persequi diligentissime, quam eandem Aristoteli fuisse et Polemonis docet*. This sentence marks a stop; it is Piso’s own summary. He points to his source, once again, and recapitulates: “Antiochus ap-

²¹ For this use of *adhibere* see e.g. Cic. *Verr.* 2.5.81: *nonnumquam etiam libertus Timarchides adhibebatur* (i.e. in addition to other guests); *Tusc. Disp.* 5.99: *ad panem (nihil) adhibere praeter nasturcium*; *Luc.* 12: *adhibito Heraclito doctisque compluribus* (they were admitted to Antiochus’ disputations); 112: *neque adhiberet* [conjecture of 1493] *illam magnam accessionem* (without “adding” to the definition ...) *De Off.* 1.147: *ad ea eligenda, quae dubitationem afferunt, adhibere doctos homines* (in addition to one’s own judgement); Vergil, *Aen.* 8.56: *hos castris adhibe socios* (the Arcadians in addition to the Trojans).

proves of (*or* inquires into?) the ethical *telos* of the 'ancient' philosophers, which, according to his teaching, is the same for Aristotle and for Polemo."—Next (15) come some rather vague reflections on the importance of knowing the *summum bonum*, followed (16–23) by one more routine piece of Antiochus' courses on ethics, taken either from Cicero's lecture notes or, more probably, from a doxographical handbook: i.e. the "Carneadean division" *qua noster Antiochus libenter uti solet*. It is evident from the wording that Piso here produces a new item of Antiochean doctrine. As with the preceding ones, it is he who has selected it, and as if to justify himself he assures his audience—and thereby Cicero assures his readers—that this *divisio* was among Antiochus' favourite topics.

Finally, in section 24, Piso embarks on the centrepiece of his exposition, to be delivered in one continuous speech. There is just one minimal interruption (27); the argument is homogeneous and coherent. Characteristically, no "source" is indicated or hinted at within the speech. Only when he has ended does Piso make it clear that he has followed Antiochus of Ascalon (cf. above, 323 and 326f.). Theophrastus as a source is out of the question, as I hope I have proved. The proof has turned out unduly tortuous and long-winded. But it is something to destroy a chimera.

I have not added any new evidence on the relation between Theophrastus and the Academy. On that topic all that can be said has been said, elegantly and eloquently, by John Glucker. So, all things considered, let us thank him again.²²

²² I am indebted to J. M. van Ophuijsen for emending my English in this paper.

16

Theophrastus and Epicurean Physics

David Sedley

In this paper I shall try to show that an Epicurean group of arguments for the world's impermanence, preserved by Lucretius, is a direct response to a passage of Theophrastus. At the end, I shall sketch some rather more speculative conclusions about the debt of Epicurean physics to Theophrastus.

I. Theophrastus 184 FHS&G

The passage of Theophrastus in question is 184 FHS&G.¹ Philo (*De aeternitate mundi* 117) reports as follows (184.1–4):

Theophrastus, however, says that those who assert that the world² is subject to coming-to-be and passing away were led astray by four principal

¹ W. W. Fortenbaugh, P. M. Huby, R. W. Sharples, and D. Gutas, *Theophrastus of Eresus, Sources for his Life, Writings, Thought and Influence* (Leiden, New York, and Köln 1992). Henceforth Theophrastus fragment numbers will refer to this edition. The fragments I shall be discussing are in fact edited by R. W. Sharples, whose translation and list of parallel passages (as well as some notes for the forthcoming commentary, and comments on my first draft, which he very kindly sent me) I have found invaluable. I follow his translation, except where indicated. 184 FHS&G will be cited by line number in FHS&G, followed by chapter reference to *De aeternitate mundi* (Aet.).

² Here and elsewhere I shall translate κόσμος 'world' ('universe' Sharples).

(considerations): (1) the unevenness of the land, (2) the withdrawal of the sea, (3) the dissolution of each of the parts of the whole, (4) the perishing of (whole) kinds of land animals.

The text then goes on to amplify these four arguments (184.4–89; *Aet.* 118–31). Finally comes a refutation of each of the four in turn.

The four arguments attacked by Theophrastus were identified by Zeller³ as belonging to Zeno of Citium. As a result, the first part of the same text became Zeno Fr. 56 in Pearson's collection,⁴ and Zeno Fr. 106 in vol. I of von Arnim's *Stoicorum Veterum Fragmenta*. They are still often regarded as Zenonian,⁵ despite the reservations that have been voiced from time to time about the passage's credentials.⁶ I shall later be arguing that Zeller's proposal is chronologically impossible, and that a better explanation of the arguments' origin is available. But let me now briefly discuss one of the items cited by Zeller in his support, since it may indicate something about the passage's character.

In developing the third argument, from the perishability of the world's parts to the perishability of the whole, the text includes the following (184.45–48, *Aet.* 125):

Do not the strongest (κραταιότατοι) stones moulder and decay, and because of the weakness of their constitution (ἐξέως)—that is the tension of their *pneuma* (πνευματικὸς τόνος), a bond (δεσμός) which is not unbreakable but only difficult to undo—do they not crumble and dissolve ...?

The language is unmistakably Stoic, as Zeller was quick to point out. True, but does that show that Theophrastus in his old age must have been defending Aristotelian cosmology against the new upstarts in the

³ E. Zeller, "Der Streit Theophrasts gegen Zeno über die Ewigkeit der Welt," *Hermes* 11 (1876) 422–29.

⁴ A. C. Pearson, *The Fragments of Zeno and Cleanthes* (London 1891).

⁵ See e.g. the long appendix in A. Graeser, *Zenon von Kition: Positionen und Probleme* (Berlin 1975) 187–206, "Zenons Argumente gegen Aristoteles' These von der Ewigkeit der Welt," A. A. Long and D. N. Sedley, *The Hellenistic Philosophers* (Cambridge 1987) II.275.

⁶ Especially H. Diels, *Doxographi Graeci* (Berlin 1879) 106–8; H. von Arnim, "Der angebliche Streit des Zenon und Theophrastos," *Neue Jahrbücher für Philologie und Paedagogik* 147 (1893) 449–67 (who, despite inveighing against the attribution of the arguments to Zeno, proceeded to print them as a fragment of Zeno in *SVF*); W. Wiersma, "Der angebliche Streit des Zenon und Theophrast über die Ewigkeit der Welt," *Mnemosyne* 3.8 (1940) 235–43; J. B. McDiarmid, "Theophrastus on the Eternity of the World," *TAPA* 71 (1940) 239–47.

Stoa? Far from it. This formal extension of *pneuma*, in varying states of tension, beyond living beings to become a universal causal agent, is hard to date earlier than Chrysippus.⁷ And we can go further than this. The language used, speaking as it does of the πνευματικός τόπος which binds even stones together, is unmistakably the Stoic-influenced language characteristic of Philo himself.⁸ Indeed, it seems clear that the language of the entire passage is primarily Philo's own.⁹ This must put us on our guard against any assumptions about how much of the content goes back to Theophrastus. But we will nevertheless see reason to regard its principal arguments as authentic, and in what follows I shall permit myself to go on calling the passage's author Theophrastus.

II. The Fourth Argument

I want to take the four arguments in their reverse order, since it is the last which most clearly demonstrates Theophrastus' influence on the Epicureans.¹⁰ This fourth argument we have already seen labelled as

⁷ See e.g. F. Solmsen, "Greek Philosophy and the Discovery of the Nerves," *MH* 18 (1961) 150–97; M. Lapidge, "Stoic Cosmology," in *The Stoics*, ed. J. M. Rist, 161–86 (Berkeley and Los Angeles 1978).

⁸ Cf. Philo, *Deus* 35–36, λίθων καὶ ξύλων ... δεσμὸν κραταιότατον ἔξιν εἰργάζεται (sc. God), ἡ δ' ἐστὶ πνεῦμα ἀναστρέφον ἐφ' ἑαυτό. ἀρχεται μὲν γὰρ ἀπὸ τῶν μέσων ἐπὶ τὸ πέρατα τείνεσθαι. Cf. *Bel.* 80; *Her.* 242, τῶν πνευματικῶν τόνων, οἱ συμφέστατος δεσμός ἦσαν.

⁹ See further Wiersma 1940. In addition to his evidence, note e.g. l. 56 (*Aet.* 127) τὴν μακρηγορεῖν περὶ ..., 184.93 (*Aet.* 132) ὃ γενναῖοι, and 184.132 (*Aet.* 138) τριπόθητον, all typically Philonian flourishes. Ian Kidd also points out to me the typically Philonian λεώφορος 184.13 (*Aet.* 119), and Diskin Clay the citation of Euripides Fr. 839 Nauck at 184.169–71 (*Aet.* 144), a fragment also quoted by Philo at *Aet.* 5 and 30.

¹⁰ Since writing the first draft of this paper, I have unearthed many of the same points of comparison between the Theophrastus fragment and Lucretius V in the long chapter 9 of E. Bignone, *L'Aristotele perduto e la formazione filosofica di Epicuro* (Florence, 1936). His thesis is that Zeno, Theophrastus and Epicurus were all engaged in a debate sparked by Aristotle's *De philosophia*: Zeno produced the four arguments against Aristotle, Theophrastus replied to them, and then Epicurus rehabilitated them. Although I shall argue that this cannot be entirely the right story, Bignone's discussion does contain many acute observations on the links between the Theophrastus and Lucretius texts (following the lead of E. Norden, "Über den Streit des Theophrast und Zeno περὶ ἀφθαρσίας κόσμου," *Jahrbücher für Classische Philologie*, suppl. 19 [1893] 440–52). Typically of Bignone, they are hidden in a jungle of confused speculation which makes them hard to pick out (especially for those already repelled by the author's incessant self-congratulation). For instance, although his conclusion is that the Epicureans were responding to the Theophrastus text, he frequently talks as if it were the

"the perishing of (whole) kinds of land animals." The details, when they come, match this description crudely at best (184.80–83, *Aet.* 130):

The fourth and remaining argument is to be stated precisely in the following way, they say. If the world were eternal, living creatures too would be eternal, and especially the race of men, in so far as it is superior to the others. But that (man's) origin is recent is clear to those who wish to inquire into natural matters.

After a brief argument for the recentness of man's arrival, interrupted by a lacuna, the passage concludes (184.87–89, *Aet.* 131):

But if man(kind) is not eternal, neither is any other living creature; so neither are the places in which these live, earth and water and air. And from this it is clear that the world is perishable.

Clearly a more complex argument has been condensed.¹¹ Roughly, it seems to run:

- (a) Man is of recent origin.
- (b) What has a temporal origin has a temporal end [a standard assumption].
- (c) Therefore man will one day perish.
- (d) Other species are less favoured than man, so will perish too.
- (e) Since the species inhabiting earth, water and air will perish, those elements will themselves perish [no reason given].
- (f) Since three of the four cosmic masses will perish, the world itself will perish.

It is not yet clear why in Theophrastus' introductory summary—"the perishing of (whole) kinds of land animals"—the species covered by (d) and (e) should have been narrowed down to land animals, but we can safely postpone the answer to this puzzle for a while. More urgently, we might ask whether Philo's paraphrase distorts the original balance of the argument, by concentrating almost exclusively on step (a), the recent

other way round (2.450, 456–58, 472–73). All this has had the effect of making his real discoveries pass virtually unnoticed. Even P. Boyancé, *Lucretius et l'épicurisme* (Paris 1963) 214–21, while endorsing Bignone's general thesis about the polemical motivation of Lucretius V, totally fails to pick up the crucial role of Theophrastus 184. On this topic, cf. also F. Solmsen, "Epicurus and Cosmological Heresies," *AJP* 72 (1951) 1–23.

¹¹ This point is well made by D. Runia, *Philo of Alexandria and the Timaeus of Plato* (Leiden 1986) 83.

origin of man. But it will become clear that this was, at least, the step on which Theophrastus chose to concentrate his criticism, and on which he therefore probably concentrated his summary too. Significantly, it is also the part of the argument singled out for defence by the Epicureans. The details of step (a) are given as follows (184.82–87, *Aet.* 130–31):

But that (man's) origin is recent is clear to those who wish to inquire into natural matters; for it is reasonable, no, rather, necessary that the crafts should exist alongside mankind and be of the same age, not only because what is systematic is proper to what is rational by nature, but also because it is not possible to live without these. So let us consider the date of each (craft), disregarding the stories told about the gods by the tragic poets [lacuna].

Unfortunately the promised survey of the crafts has vanished into the lacuna at the end. But we can infer something of its contents from the argument at Lucretius 5.324–34:¹²

Besides, if earth and heaven had no origin of birth, and always existed, being eternal, why is it that other poets have not also sung of other things before the Theban War and the sack of Troy? Into what place have all those deeds of men again and again fallen, and nowhere been planted and flourished in the eternal monuments of fame? But actually, I believe, the world is new and of recent birth,¹³ and did not begin long ago. That is why even now some crafts are being perfected, even now developing. Only now have certain improvements been made to ships, just recently did musicians create their melodious sounds.

Now the mere correspondence of Lucretius' argument with the truncated one recorded by Theophrastus does not yet demonstrate that the Epicureans learnt it from Theophrastus. The hypothesis of a common source would do as well. But the supposition of direct Theophrastean influence will become unavoidable as soon as we see that the Epicureans have adjusted their version of the argument to take account of Theophrastus' criticisms.

Theophrastus' first criticism is as follows (184.172–76, *Aet.* 145):

Certainly, to continue, it is complete foolishness to judge (the antiquity) of the human race from the crafts. For if someone follows this absurd

¹² Lucretius concludes this passage, at 335–37, with a comment on the newness of his own philosophical task; this is presumably his own personal touch, and can be ignored for present purposes.

¹³ For this translation of *recensque naturast mundi*, see D. Clay, *Lucretius and Epicurus* (Ithaca and London 1983) 86–87.

argument he will show that the world is quite new, having been put together hardly a thousand years ago, since those who we are told were the discoverers of the crafts do not go back more than that number of years.¹⁴

It is not clear why Theophrastus infers that the world will be *no* older than mankind. He may be assuming, either on his own account or by inference from step (e), that the principal cosmic masses have only the same lifespan as the species which inhabit them. But whatever his reasons, it seems clear that his inference was accepted and accommodated by the Epicureans.¹⁵ Lucretius, as we have just seen, builds it into his version of the argument that both the crafts, and the world itself, are indeed of very recent origin—barely older than the Theban and Trojan wars. It is evident that this must be an Epicurean concession rendered expedient in order to meet the Theophrastean objection, rather than a standard tenet. For in an argument at the end of book II, undoubtedly echoing an original passage of Epicurus,¹⁶ Lucretius has already argued for the world's perishability on the premise that, far from being young, it has already passed its peak and entered its terminal decline.

Theophrastus' objection to the argument continues as follows (184.176–204, *Aet.* 146–49):

If then we are to say that the crafts are as old as mankind, we must do so not carelessly and lazily, but with the help of research concerning nature. What does that research (tell us)? Destructions of things on land,¹⁷ not of all of them together but of most of them, are attributed to two principal causes, indescribable onslaughts of fire and water; they say that each of these descends (on the world) in turn, after very long cycles of years. So, when a conflagration occurs, a stream of fire from heaven is poured out from above and scattered far and wide, spreading over great regions of the inhabited earth; when there is an inundation, all the substance of water rushes down in the form of rain;¹⁸ rivers fed by their own springs, and winter

¹⁴ The figure 1,000 years confirms that we have here Theophrastus' own formulation, not Philo's. Plato, in Theophrastus' own lifetime, could speak of the arts as 1,000 or 2,000 years old (*Leg.* 677D), but no one in Philo's day, four centuries later, could plausibly still have put the figure as low as 1,000.

¹⁵ This fact seems to preclude the possibility that the inference used a teleological premise, namely that the cosmic masses exist purely for the sake of their respective inhabitants.

¹⁶ 2.1118–74. It relies on the analogy of the world's growth and decline to those of a living being, 1118–43, an analogy already invoked for the same purpose by Epicurus, see fr. 305 Usener.

¹⁷ τῶν κατὰ γῆν ("things on the earth" Sharples). Or perhaps "land species."

¹⁸ "Every sort of water rushes down," Sharples. But I think ἅπασαν τήν is more

torrents, not only flow in spate but exceed the usual level to which they rise and either break down their banks or leap over them, rising to the greatest height. Then they overflow and pour out over the adjacent plain. This is first of all divided into great lakes, as the water always settles into the hollow parts, but as the water continues to flow in and submerges the intervening strips of dry land by which the lakes are separated, in the end it becomes a great expanse of sea as the many (lakes) are joined together.

And by these conflicting forces those who dwell in opposite places are destroyed in turn. The fire destroys those (who dwell) on the mountains and hills and in places where water is scarce, since they do not have abundant water, which is the natural defence against fire. And conversely the water (destroys) those who (dwell) by rivers or lakes or the sea; for evils are accustomed to fasten on those close at hand, at first or even solely.

When the greater part of mankind perishes in the ways stated, apart from countless other minor (ways), of necessity the crafts fail too; for it is not possible to see knowledge on its own, apart from its practitioner. When the common diseases¹⁹ abate, and the race begins to grow and flourish from those who were not previously overcome by the troubles that pressed upon them, then the crafts too begin to arise again; they have not come into being for the first time then, but had become rare²⁰ because of the reduction in the number of their possessors.

Theophrastus' point is of course that the data to which the fourth argument appeals—the newness of the crafts—could equally well be accounted for by periodic cataclysms in an eternal world. Two aspects are worth noting in passing.

First, we can now see that it must be Theophrastus himself who chose, at the beginning of the fragment, to characterise the fourth argument as based on "the perishing of (whole) kinds of land animals." For near the beginning of his reply to it, just quoted, he notes that it is primarily the virtual destruction of *land* species that could equally well be accounted for by periodic conflagrations and floods. Water dwellers would clearly be largely immune to both, nor would one expect birds to be badly affected by either, given the availability of water as a refuge from fire, and high ground from flood (184.192–97, *Aet.* 148). Revealingly, then, he turns out to be labelling the argument from the outset, not in the terms in which its proponents would present it, but with an eye to the nature of the refutation he is already planning. His project is not to catalogue oth-

likely to mean 'all' than 'every'. I also prefer not to delete κατομβρίαν, with Diels, but to emend it to κατ' ὄμβρον, "in the form of rain."

¹⁹ I translate νόσοι 'diseases', not 'ills' with Sharples, in order to bring out a link with Lucretius—see below.

²⁰ ὑποσπανισθείσας: "(previously) neglected," Sharples.

ers' arguments in the manner of a neutral observer, but to engineer a dialectical confrontation. We will be able to make use of this observation later.

Second, as David Runia has expertly brought out,²¹ the description of conflagration and flood draws heavily on *Timaeus* 22—not actually with any verbatim quotation, but with an extended interpretative paraphrase. Runia argues, reasonably enough, that this “slavish dependence on an authoritative text” is more likely to betray Philo’s hand than Theophrastus’. He points out that, while Theophrastus as an Aristotelian can be expected to subscribe in general terms to the theory of periodic cataclysms,²² Aristotle seems to have concentrated on floods (especially *Meteor.* 1.14), to the exclusion of conflagrations.

Runia’s conclusion is certainly appealing. On the other hand, the passage does not really read like anybody’s appeal to authority. On the contrary, that the debt is specifically to Plato is, if anything, disguised by the paraphrastic style and the inexplicit attribution, ‘they say’ (φασίν, 184.181, *Aet.* 146 fin.). I strongly suspect that the Timaeian material was already included by Theophrastus, motivated not by reverence for Plato but by a dialectical strategy. But to this too we will return to later.

What can be asserted with some confidence is that, with or without the Timaeian details, the reference to conflagration as well as flood was already in the Theophrastean reply as Philo found it. That is because Lucretius, immediately following his own appeal to the newness of the crafts, can be seen making a direct countermove to the Theophrastean reply, and doing so with explicit reference to fire as well as flood (5.338–50):

If however you happen to believe that all the same things existed previously, but that the generations of men perished through scorching heat, or that cities fell because of a great cosmic upheaval, or that as a result of incessant rain the rivers overflowed to sweep over the land and engulfed the towns, you are all the more defeated, and must admit that earth and heaven will also be destroyed. For when the world was beset by such ter-

²¹ Runia 1986, 83–84.

²² Aristotle, *De philosophia* Fr. 8 Ross shows that he taught, at least in the case of philosophy, that it was all but wiped out by periodic cataclysms, but regenerated from the remnants—much the same theory as is applied to the crafts in the Theophrastus text. For Theophrastus himself there appears to be no independent evidence, but 584A shows that he subscribed to *some* sort of genetic theory of human civilisation, and it is hard to think what that can be if not the cataclysm theory.

rible diseases and dangers, if at that time a more ruinous cause had settled on it, it would have faced widespread destruction and massive catastrophe. The reason why we are seen by each other to be mortal is precisely that we fall ill with the same diseases as those people whom nature has removed from life.

Unmistakably, the Epicureans have taken account of the Theophrastean reply and tried to turn it to their own advantage, arguing that to cite cataclysmic events like conflagrations and floods as explaining the newness of the crafts is to allow that the world might perish in those events.²³ Lucretius' description even echoes Theophrastus in certain details.²⁴ In particular, where Theophrastus, echoing a simile at *Tim.* 23A 7, had spoken of the cataclysms as 'diseases' (νόσοι, 184.200, *Aet.* 149) which eventually abate, Lucretius too calls them diseases (*morbis*, 345), but adds pointedly—drawing on the lessons of book III (especially 472–73)—that in our own experience there is an intimate link between disease and mortality.

It emerges, then, that the palpable dialectical interplay between Lucretius 5.324–50 and Theophrastus' presentation and refutation of the fourth argument for the world's impermanence is so tight that it can only be explained on the assumption that the Epicureans were responding directly to Theophrastus.

III. The Third Argument

Moving backwards now to the third argument, we will be able to detect a similar pattern. This is the argument from "the dissolution of each of the parts of the whole." The expansion of this at 41–79 (*Aet.* 124–29) contains some strange intrusions—not just what we have seen to be Philo's own inserted remarks about the "pneumatic tension" of stones, but also a long and grotesque comparison of fire to suicidal Indian

²³ But for the interruption at 351–79, it might seem natural to read 380–415 as continuing this same argument. But note that while 338–50 has a highly hypothetical character, provoked by the need to answer Theophrastus, 380–415 changes tone and argues from mythical evidence that there actually have been a conflagration and a flood. While this may indirectly echo *Tim.* 22C, it does not seem to be part of the reply to Theophrastus.

²⁴ Cf. Bignone 1936, II.475. The attribution of the flood to heavy rain making rivers overflow is a further shared feature of the two passages, but no doubt too commonplace to carry any weight here.

snakes squashed under the fallen bodies of the elephants they have just killed. (Whether you blame this latter oddity on Theophrastus or on Philo seems arbitrary—it simply depends on which one you are prepared to have the worse opinion of.) It can be outlined as follows. Each of the four cosmic masses—earth, water, air and fire—consists of parts which eventually perish: stones crumble, water becomes putrid, air becomes sickly, fire burns itself out. Therefore the universe, consisting of these mortal parts, is perishable too.

Lucretius at exactly the corresponding point—5.235–323, immediately preceding his version of the fourth argument—similarly argues that the world has a temporal beginning and end on the ground that each of the four cosmic elements is unstable. Significantly he even, twice over, takes the four elements in the same order as Theophrastus. This sequence—earth, water, air, fire—follows the cosmic strata outwards from earth to the heavens, and is not used elsewhere by Lucretius except in a passage where, unlike here, he is specifically describing the layered structure of the world (5.449–59, 495–98; contrast the different orders of the elements adopted at 1.567, 715, 744, 5.142–43, 248–49). This correspondence helps confirm the impression that he is taking his lead from the Theophrastean text.

Theophrastus' own reply to the version of the argument which he reports is that ordered cyclical change of the elements into each other points if anything towards the everlastingness of the world (cf. Aristotle, *GC* 337a1ff.): destructibility would follow only if all the parts perished simultaneously. This time the Lucretian version less obviously contains any direct response. But he does take up the point about cyclical change, and develops it in a different direction. He describes each of the four cosmic masses neither as perishing *tout court*, as in the argument reported by Theophrastus, nor as perishing into the neighbouring element, as in Theophrastus' reply, but as undergoing an internal cyclical change in the form of dispersal and accumulation. Earth is eroded, but replenished with decaying organic matter. Sea and rivers evaporate but are refilled. The air is constantly both absorbing and depositing particles shed by other things. And the sun, moon and stars are constantly both shedding light and renewing their supply of it.

How is this meant to prove their overall destructibility? There seems good reason to believe that Lucretius is reproducing, if imperfectly, Epicurus' own revision of the argument reported by Theophrastus. For where that argument had inferred the perishability of the world from the

perishing of its parts, we are told that Epicurus, like Lucretius in our passage, inferred it from the *change* which the world's parts undergo.²⁵ Adding the clues supplied by Lucretius, we can perhaps reconstruct the full Epicurean argument as follows. Theophrastus has argued that, provided the perishing of the elements is their cyclical destruction into one another, there need be no implication of eventual overall destruction. But on the contrary, such radical change would itself amount to instant annihilation (see *Lucr.* 1.782ff.), leaving the natural cycle with no enduring substrate to account for its evident regularity—the regularity invoked by the main Epicurean arguments for atomism. In reality a process like, say, evaporation, which Theophrastus calls the destruction of water into air, is the dispersal of water's unchanging atomic particles into the atmosphere. So too quite generally, the destruction Theophrastus speaks of takes the form of the dispersal and accumulation of each cosmic mass. This does, unlike Theophrastus' theory, account for cosmic regularities. But if it is possible for a thing to be dispersed in part, it is at least possible for it to be dispersed in its entirety.²⁶ And given infinite time, every possibility is sooner or later realised.²⁷ Therefore each cosmic mass will eventually disperse in its entirety.

Read this way, the Epicurean argument looks like a considered reply to the debate constructed by Theophrastus, accepting his criticism that the original argument failed to allow for the cyclical character of elemental change, but re-analysing that cycle in atomist terms which justify the expectation that the cosmic order must eventually disintegrate.

IV. The First and Second Arguments

I hope by now to have made a sufficiently persuasive case for reading the entire sequence of arguments at Lucretius 5.235–350 as a systematic Epicurean defence against Theophrastus of the third and fourth argu-

²⁵ Scholion on *Ep. Hdt.* 74: φθαρτοὺς φησι τοὺς κόσμους, μεταβαλλόντων τῶν μερῶν.

²⁶ For a version of Theophrastus' argument which tries to refute this inference, see Alexander, *Quaest.* 1.23 (transl. with notes by R. W. Sharples, *Alexander of Aphrodisias, Quaestiones 1.1–2.15* [London 1992]), which could conceivably be responding to the Epicureans.

²⁷ For Epicurean use of the principle of plenitude, see Fr. 266 Usener, and cf. *Lucr.* 1.232–33, 3.855–61. The same principle underlies the argument of Melissus which started this entire debate (B 7.2): "If it were to become changed by a single hair in 10,000 years, it would all perish in the whole of time."

ments for the world's impermanence, as reported and criticised by him.

The first argument, from "the unevenness of the land," is that, if the world had existed from infinite time past, erosion would by now have completely flattened the mountains (184.4–17, *Aet.* 118–19). Theophrastus' reply (184.91–128, *Aet.* 132–37) is that, mountains being volcanically caused, their erosion is counterbalanced by new growth. It is worth noticing that Lucretius does in passing, at the end of his version of argument 3, echo this same argument. After working his way through the four elemental masses, as we saw, he adds to his list of unstable items the two things with the strongest claim to indissolubility: solid rock (5.306–17) and the vault of heaven (318–22). The fragility of solid rock is illustrated not only with the decay of buildings but also with mountain erosion (5.313–17):

Do we not see rocks roll down, torn from high mountains, unable to endure the mighty force of a finite timespan? For they would not suddenly be torn away and fall if they had from infinite time past suffered without damage all the harsh treatment of the ages.

This pointedly recalls the Theophrastean erosion argument (between them, in fact, they seem to be the *only* recorded arguments inferring the world's impermanence from the timescale of mountain erosion). But the tactic has changed. The original argument had relied on the incompleteness of mountain erosion to show that it had started only a finite number of years ago. Lucretius' version instead uses the actual phenomenon of mountain erosion to show that even the most solid objects, like lumps of rock, are subject to dissolution within a finite timespan. And, crucially, this reworked version is invulnerable to Theophrastus' objection. We may put it down as yet another Epicurean rehabilitation of the arguments pilloried by Theophrastus.²⁸

Finally, the second argument, from "the withdrawal of the sea" (184.18–40, *Aet.* 120–23). It may be summarised as follows. The sea has steadily diminished in size, as is shown (a) by islands which have within recorded history appeared out of the sea, (b) by the pebbles and seashells found in inland areas. We may infer that earth and air are likewise diminishing, and that all three elements will end up as fire.

²⁸ Von Arnim 1893 notices the connexion between the Theophrastean and Lucretian arguments, but is clearly unjustified in inferring that Theophrastus was himself reproducing an Epicurean argument. Quite apart from the chronological problem, this overlooks the important difference between the two versions.

Theophrastus objects (184.129–58, *Aet.* 138–42) that there is just as much evidence that elsewhere the sea has spread in historical times, so that an equilibrium between land and sea is being maintained. Once again, his reply is directly drawn from Aristotle (see *Meteor.* 1.14; cf. Theophrastus, *Metaphysics* 10a28–29), but the actual evidence he cites is more widely gathered, including the Atlantis myth cited from the *Timaeus*.

Unlike the other three, Lucretius altogether omits this argument. To have adopted the premise that the sea is diminishing would clearly have militated against the claims he makes at 5.235–323 when rehabilitating the third argument, namely that each cosmic mass, including the sea, undergoes cyclical change in the form of dispersal and counteracting replenishment.²⁹ For once, the Epicureans may have thought Theophrastus' rebuttal well founded.³⁰

V. The Provenance of 184 FHS&G

We can now turn to the character of the work in which Theophrastus presented and criticised the four arguments. I have already noted two features. One is that right from the outset he presents the arguments not in their own right but as materials for a dialectical confrontation. The other is that although the rebuttals clearly accord in general terms with his own Aristotelian views, they incorporate a good deal of material drawn from non-Aristotelian sources, such as the *Timaeus* with its thesis of periodic conflagrations and its Atlantis myth. It is as if the dialectical confrontation which he is engineering is not meant to be overtly one between Aristotelians and non-Aristotelians.

I can now add to these observations one about the heterogeneous provenance of the four arguments themselves. It is clearly a mistake to treat them as a unified body of argument, traceable to a single philosopher or school. Nothing is known of the origins of the first and fourth arguments, but something can be said about the other two. The second, from the sea's withdrawal, and also Theophrastus' own refutation of it, are both drawn directly from Aristotle, *Meteorologica* 1.14 (especially 352a17ff.). Aristotle in fact later (2.3, 356b6ff.) names Democritus as its

²⁹ Cf. Lucretius 6.608–38 on the equilibrium between the sea's depletion and replenishment.

³⁰ Cf. Bignone 1936, II.492–93.

author. However, we may doubt whether Theophrastus wanted to attach it exclusively to Democritus. For one thing we know that he spoke of Anaximander and Diogenes as proponents of the thesis that the sea will eventually dry up.³¹ For another, he also incorporates into the argument a reference to seashells on dry land as testimony to the sea's withdrawal, an observation known to stem from Xenophanes.³² Finally the further idea, also incorporated into the argument, that all the elements will eventually turn to fire could hardly be represented as Democritean, but may on the other hand reflect Theophrastus' reading of Heraclitus—that the world as a whole originates from fire and eventually returns into it.³³ It seems, in short, that Theophrastus was trying to associate the argument with a wide range of earlier philosophers, and not to record the views of any one person.

There is certainly no necessity to see in the second argument a specific allusion to the Stoic ecpyrosis theory—even though the Stoics did in due course take up the Theophrastean interpretation of Heraclitus, as well, incidentally, as adopting a version of the second argument itself (DL 7.141 fin.). Nor need the third argument presuppose Stoicism, as many have thought, despite the fact that a Stoic version of it is recorded (DL 7.141). Zeller reasoned that, since it was Aristotle who made the world's eternity an issue for the first time, the objections recorded by Theophrastus must be post-Aristotelian, and that Zeno is the first suitable proponent to assign them to. But here it may be objected that the debate had multiple sources—witness for instance Democritus' contribution—and that it stemmed in large measure from Plato's *Timaeus* and the controversy, which was to run throughout the remainder of antiquity, as to whether its description of the world as *γενητός* refers to a literal genetic origin.

³¹ Theophrastus 221 FHS&G.

³² Hippolytus *Ref.* 1.14.5.

³³ 225 FHS&G. See e.g. G. S. Kirk, *Heraclitus, the Cosmic Fragments* (Cambridge 1954) 318ff., 327ff.; J. Kerscheneiner, "Der Bericht des Theophrast über Heraklit," *Hermes* 83 (1955) 385–411, for the generally accepted view that Theophrastus (i) interpreted Heraclitus this way and (ii) influenced the later Stoicising presentation of him. (A. A. Long, "Heraclitus and Stoicism," *Φιλοσοφία* 5–6 [1975–76] 131–56 disputes (ii) but accepts (i).) The evidence is not unambiguous, but his attribution (225.18–21 FHS&G) to Heraclitus of a fated time-limit on cosmic change is probably a development of Aristotle's view (*De Cael.* 1.10, 279b14) that Heraclitus agrees with Empedocles in making the world everlastingly move between alternate generation and destruction.

Speusippus and Xenocrates took the creation as a purely expository device, but it can hardly be doubted that at least some early Platonists, like their ex-colleague Aristotle³⁴ in their own day and their fellow-Platonists Plutarch and Atticus in the second century AD, defended the genetic reading. It is easy to imagine that the third argument's inference, from the perishability of the world's parts to that of the whole, originated in the interpretation of its mirror image at *Tim.* 28B: the argument that the world is something 'which becomes' (γιννόμενον) and that it therefore, as a whole, 'has become'.

We are told (241A–B FHS&G) that Theophrastus in his work *On physical opinions* (Περὶ τῶν φυσικῶν δόξων), while acknowledging the Speusippean interpretation of the *Timaeus* as a possible one, based his own criticisms of Plato on the genetic reading. It is more than likely that this was the context from which 184 FHS&G is drawn. Jaap Mansfeld has recently argued that this work, variously called *Physical opinions* and *On physical opinions*, was not a history of physics, but a collection of materials for use in dialectical debate about physical issues, and included Theophrastus' own counter-arguments to the positions supported by others.³⁵ The dialectical structure that has emerged in 184 FHS&G fits this description to perfection.³⁶

VI. Epicurus, *On Nature* X–XII

So far I have maintained that Lucretius V contains arguments which are best read as an Epicurean response to Theophrastus 184 FHS&G, itself possibly a remnant of the section of his *On physical opinions* dealing with the origin of the world. The next step is to show that Lucretius' arguments are themselves derived from Epicurus.³⁷ Book V of Lucretius

³⁴ Aristotle (*De Cael.* 279b32) attributes the non-genetic reading to "some people," which is not most obviously interpreted as signalling the unanimous view of the Academy. On Aristotle's reading, see also M. Baltes, *Die Weltentstehung des Platonischen Timaios nach den antiken Interpreten* (Leiden 1976) 5–22.

³⁵ J. Mansfeld, "Physikai doxai and *Problēmata physika* from Aristotle to Aëtius (and Beyond)," in *Theophrastus: His Psychological, Doxographical and Scientific Writings* [RUSCH 5], ed. W. W. Fortenbaugh and D. Gutas, 63–111 (New Brunswick, NJ 1992). I also accept his convincing defence of the title as (*On*) *physical opinions*, not (*On*) *the opinions of the physicists*.

³⁶ *Phys. op.* is the work to which Diels, following Usener, assigned the fragment (numbering it *Phys. op.* fr. 12); see H. Diels 1879, 106, 486–91.

³⁷ This is one of the few issues on which I remain in disagreement with Diskin

contains the following sequence of topics:

- (a) the world had a beginning, and will have an end (5.1–415)
- (b) the origin of the world (5.416–508)
- (c) the motions of the heavenly bodies (5.509–33)
- (d) the stability of the earth (5.534–63)
- (e) the sizes of the heavenly bodies (5.564–613)
- (f) astronomical phenomena (5.614–770)
- (g) the rise of civilization (5.771–end)

This sequence of topics is in large measure a direct reflection of that in Epicurus' *On nature*, books XI–XII. Epicurus' own sequence can be reconstructed³⁸ out of the papyrus remains of book XI (Arr.² 26), some indirect citations of books XI and XII,³⁹ and the parallel texts in the *Letter to Herodotus* and the *Letter to Pythocles*, of which the former is expressly an epitome of the *On nature* (or at least part of it, namely I–XIII), the latter expressly an epitome of one or more works by Epicurus, with at least sections 88–98 in fact turning out to follow a section of *On nature* XI–XII passed over in the *Letter to Herodotus*. When this information is put together, it turns out that Lucretius' sequence from (b) to (g) matches exactly the model set by Epicurus, with the one exception of (e), which Epicurus had placed earlier, between (b) and (c).⁴⁰ There is

Clay's inspiring book (1983). He has stood out against the view that Lucretius worked directly from an original Greek Epicurean text or texts (see esp. 26–35). In a future paper I shall argue that Lucretius initially followed the text of Epicurus very closely, then in a second phase reordered the material, but at his death had only reordered books I–III. In the mean time, Mansfeld's conclusions concerning the provenance of the meteorology in book VI can be cited in support (below, n. 66). However, it should be acknowledged that Mansfeld himself, in his "Bad World and Demiurge: A 'Gnostic' Motif from Parmenides and Empedocles to Lucretius and Philo," in *Studies in Gnosticism and Hellenistic Religions*, ed. R. van den Broek, M. J. Vermaseren, 261–314, pp. 309–12 (Leiden 1981), regarded Lucr. 5.91–415 as reflecting multi-targeted Epicurean polemics of the first century BC.

³⁸ For the evidence on this, see my "The Structure of Epicurus' *On Nature*," *Cronache Ercolanesi* 4 (1974) 89–92; "Epicurus and the Mathematicians of Cyzicus," *Cronache Ercolanesi* 6 (1976) 23–54, esp. n. 55; "The Character of Epicurus' *On Nature*," *Atti del XVII Congresso Internazionale di Papirologia* (Napoli 1984) 381–87.

³⁹ Scholia on *Ep. Hdt.* 74, *Ep. Pyth.* 91, 96; and Arr.² 27.

⁴⁰ Epicurus' sequence is: (b) origin of world (*Ep. Pyth.* 89–90); (e) sizes of heavenly bodies (*Ep. Pyth.* 91; *Nat.* XI, schol. on *Ep. Pyth.* 91); (c) motions of heavenly bodies (*Ep. Pyth.* 92); (–) omitted by Lucretius, attack on astronomical devices (*Ep. Pyth.* 93; *Nat.* XI, 9 III–10 I); (d) stability of earth (*Nat.* XI, 10 I–end); (f) astronomical phenomena (*Ep. Pyth.* 93–98; *Nat.* XII [see XI fin.]); (–) omitted by Lucretius, other worlds

then, a strong likelihood that the whole of book V is closely based on either *On nature* XI–XII or a source directly derived from it, and that (a), on the impermanence of the world, also corresponds to a lost original from the early part of *On nature* XI, or maybe from near the end of X.⁴¹

The sequence of topics is itself a curious one. Why let the topic of astronomy interrupt the ordered account of the world's origin and development? There is good reason to attribute the sequence not to any concern of Lucretius' own,⁴² but to one which may well have motivated Epicurus, namely the need to respond to the account of the creation in the teleologists' bible, Plato's *Timaeus*. For there the motions of the heavens and earth occupy a closely analogous position, between the origin of the world (28B–34A) and the origin of man (41Aff.), being integral to the construction of the world soul. One can imagine that Epicurus, in developing his own account of the world's origin in *On nature* X–XII, felt the need to respond to the *Timaeus* point by point.

This anti-Timaeian motive is in fact borne out by a closer look at (a). For instance, Lucretius' series of arguments against the divinity of the world—that the world cannot be alive (126–55), that the gods cannot have created it, for lack of either a motive or a model to give them the idea (156–94), and that it is not good enough to be divine handiwork (195–234), look like a co-ordinated response to *Tim.* 29E–30C, where the world is the good product of a benevolent creator, and is animate, being modelled on the ideal Living Being.

Anti-Platonist too, I believe, is the way Lucretius puts the denial of

(*Nat.* XII [*Ep. Hdt.* 73–75 and scholion on 74]); (g) rise of civilisation (*Nat.* XII, Arr.² 27). If it was Lucretius, rather than an intermediary, who moved (e) to a less prominent position, it may have been because Epicurus had wished to stress its damaging implications for the accuracy of astronomical observations (cf. my "Epicurus and the Mathematicians of Cyzicus," [above, n. 38]), and Lucretius (cf. his omission of the attack on astronomical devices) was not interested in pursuing that kind of critique.

⁴¹ Bignone 1936, II.464–72 argues that the references to recent developments in navigation and music at *Lucr.* 5.332ff. are more likely to reflect the situation in Epicurus' day than in Lucretius'.

⁴² In fact I believe there are signs that at his death he was planning to alter the sequence he had inherited. The programmatic sketch in the proem to book 5 (5.64–81) puts astronomy *after* the rise of civilisation (effectively reattaching it to the meteorological material in book 6, just as Epicurus had done in the *Letter to Pythocles*). The proems almost certainly represent Lucretius' latest plans for the eventual structure of the poem. But defence of this proposal must wait for another occasion.

divine creation at the service of his disproof of the world's indestructibility. At 156ff. he argues against those who maintain that the world was created by the gods for the sake of man, and that it will therefore last forever. These are standardly taken to be the Stoics, on the ground that no one before them held that the world was created for the sake of man. I am convinced that this is mistaken,⁴³ and that it therefore offers no ground for doubting my contention that Lucretius' argument derives from one composed by Epicurus, whose work probably precedes the rise of Stoicism. The thesis attacked is that the world was divinely created, and therefore will never be destroyed. But most Stoics held that the world would one day be destroyed, in the *ecpyrosis*. Those few who dissented, principally Boethus and Panaetius, not unnaturally adopted the matching thesis that the world had no beginning either.⁴⁴ The asymmetrical thesis attacked by Lucretius—creation, but no destruction—was regularly seen as the idiosyncratic view of Plato's *Timaeus*.⁴⁵ This attribution was accepted by, among others, the Epicureans, who expressly distinguished the Platonic from the Stoic position in this regard.⁴⁶ What is more, the *Timaeus* also contains the principal thesis attacked by Lucretius—that it is thanks to the benevolence of its creator that the world will never be destroyed (*Tim.* 32C).

The one element which the *Timaeus* does not supply is the specific thesis, so characteristic of Stoicism, that the world was created for the sake of man. While it would no doubt be a mistake to credit any such view to Plato,⁴⁷ it remains entirely possible that the *Timaeus* was being

⁴³ In support I can invoke the arguments of D. Furley, "Lucretius and the Stoics," *BICS* 13 (1966) 13–33; repr. in his *Cosmic Problems* (Cambridge 1989) 183–205.

⁴⁴ See Philo, *Aet.* 76–88. I take it that οἱ περὶ τὸν Βοηθόν (78), whose argument specifically rejects cosmic generation as well as destruction, are the entire Stoic group singled out at 76 for their rejection of *ecpyrosis*.

⁴⁵ E.g. Philo, *Aet.* 13–16; cf. *ibid.* 17, where the one possible exception, and a feeble one, is that Hesiod might have held the Platonic view, because he describes the world's beginning but says nothing about its end. The one other exception known to me is at Ps.-Plutarch, *Epit.* 3.4.1, 330.15–331.3 Diels 1879, where in most versions the asymmetric *Timaeus* thesis is attributed without discrimination to Pythagoras, Plato and the Stoics. But that an unwarranted conflation has occurred (cf. Diels, 1879, *Introd.* 11–12) is clear from the parallel Stobaeus text, where the standard distinctions are observed.

⁴⁶ Cic. *De Nat. Deor.* I.20.

⁴⁷ See G. E. L. Owen, "Plato on the Undepictable." in *Exegesis and Argument*, ed. E. N. Lee et al., 349–61, pp. 355–56 (Assen 1973); repr. in his *Logic, Science and Dialectic* (London 1986) 138–47.

read in this way by Epicurus' day. At 30B–C Plato says that the world "truly came to be (γενέσθαι) an ensouled and intelligent animal, owing to the god's providence (πρόνοιαν)."⁴⁸ Divine "providence" already has strongly anthropocentric connotations (e.g. prominently at Xen., *Mem.* 4.1), and any such impression could well have been strengthened by 39B–E, where there is a clear indication that the heavenly bodies were created for the sake of man. It is certainly imaginable (although not so far as I know demonstrable) that in the Academy of the late fourth century, under Zeno's teacher Polemo, this anthropocentric reading of the *Timaeus* was already being taught, to become in due course a mainstay of Stoic cosmology.⁴⁹

Assuming some such explanation to be right, it remains plausible that Lucretius V preserves an original set of arguments from Epicurus targeted on the *Timaeus*. But it becomes less likely that the *Timaeus* was itself the text to which Epicurus was directly reacting. It is more credible that he had before him a summary or analysis of the *Timaeus* creation thesis, reflecting a currently fashionable way of reading it. And what better candidate than the work of Theophrastus we have already found probably to lie behind the Epicurean arguments for the world's impermanence?

Let me offer a parallel. Theophrastus (230 FHS&G) gave a paraphrase of the *Timaeus* which sounds uncannily like the Stoic twin physical principles, "matter" and "god": the world is analysable into a passive principle, "matter," and an active causal principle "which he attaches to the power of god and of the good." It is hard to believe that this highly revisionist interpretation is one that Theophrastus had arrived at simply by his own reading of the *Timaeus*. He surely must be echoing a way in which that text was currently being expounded in Plato's own school⁵⁰—a hypothesis which would also comfortably explain how the matter-god doctrine passed in due course into the Stoicism of Polemo's pupil Zeno.

⁴⁸ The problems of construing this sentence, discussed by D. T. Runia, "Plato, *Timaeus* 30 B 6–C 1," *Elenchos* 10 (1989) 435–43, should not affect the present issue.

⁴⁹ It cannot, however, have been the position of Crantor, whose commentary on the *Timaeus* belongs to this period, since he rejected the genetic interpretation (Procl. *In Tim.* 1.277.8).

⁵⁰ There may conceivably be a parallel explanation for Theophrastus' curiously inaccurate summary of the *Timaeus* at *Sens.* 5–6, 83–86. He seems less faithful, in this doxographical context, than at *CP* 6.1.

One may hypothesise that the anthropocentric reading of the *Timaeus*—hardly more surprising than the matter-god reading—was also taken over by Theophrastus from contemporary Platonists, and reached Epicurus at least partly through him. In which case, it becomes credible that elsewhere too in the discussion of the world's creation reproduced in Lucretius V Epicurus was guided by Theophrastus' reports of the *Timaeus*. The *Timaeus* is, let it be admitted, an exceptionally difficult text, and an up-to-date interpretative and critical guide to its account of the creation may have been more than welcome. How many of us can swear that we have never used the resources of secondary literature—indexes, interpretative summaries, editorial subheadings—to help us find our way round the *Timaeus*?

VII. 184 FHS&G and Zeno

I hope at least to have shown by now that the Lucretian material we have been examining includes a detailed response to Theophrastus 184, drawn from Epicurus' own arguments in *On nature* X–XII. This claim, if correct, has chronological implications which bear directly on Zeller's hypothesis that Zeno is Theophrastus' target.

The hypothesis always looked chronologically perilous. Zeno did not even begin his philosophical apprenticeship until 312, and is hardly likely to have made any impact of his own before the turn of the century. That leaves, at best, around 15 years, down to Theophrastus' death in 288–285, for him to have provoked the supposed reaction. But even that looks unlikely, when one bears in mind that there is absolutely no trace of any interest in Zeno on the part of Epicurus, who died in 272, and that the first opponent demonstrably to have reacted to him is Arcesilaus, who became head of the Academy at just about that time.

If we can now confidently add that the Theophrastus passage was in circulation early enough to have influenced Epicurus in book X or XI of the *On nature*, the Zenonian hypothesis cannot survive. Epicurus is known to have reached book XIV in 301/300, and book XV the following year.⁵¹ This makes it most unlikely that he could have written books

⁵¹ For the date of *Nat.* XIV, see the edition of G. Leone, "Epicuro, *Della natura*, libro XIV," *Cronache Ercolanesi* 14 (1984) 17–107, pp. 37–38. For that of XV, see the edition of C. Millot, "Epicure de la nature livre XV," *Cronache Ercolanesi* 7 (1977) 9–39, pp. 15, 26.

X–XI much after his arrival in Athens in 307. And there is in fact quite good evidence that they were written during his period at Lampsacus, 311–307.⁵² There is no way that this chronology could leave room for Epicurus to have been reacting to a Theophrastean text which had itself already been a response to Zeno.

VIII. Epicurus' Debt to Theophrastus

In this paper, I have done all I can to encourage the belief that Theophrastus' writings on physics, especially perhaps his work *On physical opinions*, helped guide Epicurus through the mass of material that constituted the background to his own major treatise on physics, providing him both with the raw arguments and with criticisms of them. Although I have confined my study to one part of Lucretius book V, I am sure the same approach would bear fruit elsewhere. Here are three examples.

(1) Lucretius book IV contains the following assortment of topics: perception, imagination, nutrition, locomotion, sleep, dreaming, and sex. This too was undoubtedly a sequence dictated by his Epicurean source,⁵³ which seems in this case to have been *On nature* II–III. As Solmsen⁵⁴ noticed, what gives the sequence its coherence is that all the functions treated are functions of the soul—but of the Aristotelian soul, not the Epicurean one. How is this oddity to be accounted for? Once again, we need only hypothesise that Epicurus, in composing the corresponding part of his treatise, was following the order of material adopted by the Aristotelian Theophrastus in assembling and criticising earlier theories.

(2) At 1.635–920, Lucretius criticises the element theories of the early physicists, in the order: monists (Heraclitus), finite pluralists

⁵² I argue this in "Epicurus and the Mathematicians of Cyzicus" (above, n. 38).

⁵³ The earlier version of the poem to IV which accidentally survives at 45–53 shows that the book was originally just a continuation from book II, following exactly the sequence of topics found in Epicurus, *Nat.* (cf. *Ep. Hdt.* 45–53 for the same sequence: multiplicity of worlds, εἶδωλα, perception). To give IV a more coherent function, Lucretius intended to focus the material on the explanation of ghosts (see the programmatic remarks in the poems, 1.132–35, 4.31–41, 5.59–63), but he evidently did not live to achieve this.

⁵⁴ F. Solmsen, "Αἰσθησις in Aristotelian and Epicurean Thought," *Mededelingen der Koninklijke Nederlandse Akademie van Wetenschappen, Afd. Letterkunde*, NR 24.8 (1961) 239–62 [= *Kleine Schriften* I (Hildesheim 1968) 612–33].

(Empedocles), infinite pluralists (Anaxagoras). There is good reason to think that this material derived from books XIV–XV of Epicurus, *On nature*. The papyrus fragments of XIV show that it ended with a critique of Plato, and the very meagre fragments of XV suggest a discussion of Anaxagoras, there being several occurrences of *homoiomereia* and cognate forms.⁵⁵ That Epicurus had himself followed a Theophrastean source, perhaps once again the *On physical opinions*,⁵⁶ is suggested by four considerations. First, the division into monists, finite pluralists and infinite pluralists is an Aristotelian one (*Phys.* 1.2, 184b15ff.) which we know was taken up by Theophrastus.⁵⁷ Second, the *homoiomereia* reading of Anaxagoras, adopted by Lucretius and, as we have seen, probably already present in Epicurus, has no apparent basis in the verbatim text of Anaxagoras, and is widely held to be an Aristotelian imposition, perpetuated by Theophrastus.⁵⁸ Third, *On nature* XIV seems to end the critique of the finite pluralists with Plato: this may reflect the apparent fact that Theophrastus took his doxography down only as far as Plato, and omitted his contemporaries, including Aristotle himself.⁵⁹ Fourth, the better-preserved parts of *On nature* XIV include criticisms of Plato which, as Wolfgang Schmid pointed out, reflect Aristotle's in *De Caelo* 3.7–8.⁶⁰ In view of what we have already seen of Theophrastus' methods, it will be both plausible and economical to guess that the Aristote-

⁵⁵ See the editions cited in n. 51 above, and cf. my comments in "The Character of Epicurus' *On Nature*," (above, n. 38) 384–85. We also know (scholion on *Ep. Hdt.* 40) that books XIV–XV returned to the opening topic of elements, and the hypothesis that they contained the critique of rival element theories reflected in Lucretius I would account for this well.

⁵⁶ In suggesting this previously ("The Character of Epicurus' *On Nature*," above, n. 38), I also asked whether it might have been the publication of this Theophrastean work that prompted Epicurus to resume work on the *On nature* (there probably being an interval of six or more years between books XIII and XIV). That idea cannot stand if I am now right that the same work had already influenced the composition of the earlier books.

⁵⁷ See J. Mansfeld, "Gibt es Spuren von Theophrasts *Phys. op.* bei Cicero?," in *Cicero's Knowledge of the Peripatos* [RUSCH 4], ed. W. W. Fortenbaugh and P. Steinmetz, 133–58, pp. 138–48 (New Brunswick, NJ 1989).

⁵⁸ See M. Schofield, "Doxographica Anaxagorea," *Hermes* 103 (1975) 1–24.

⁵⁹ This is certainly true of the *De sensibus*, and, as far as I know, is confirmed by silence about later philosophers in his fragments.

⁶⁰ W. Schmid, *Epikurs Kritik der platonischen Elementenlehre* (Leipzig 1936) [Klassisch-Philologische Studien 9].

lian criticisms had been redeployed by him in his report and critique of Plato's element theory, and were in turn taken up by Epicurus.⁶¹

(3) Epicurus in general shows little, if any, positive Aristotelian influence. At least, attempts to locate such influence in his thought, for instance in his theory of free will, have in my judgement been unconvincing. But he does undoubtedly show a negative Aristotelian influence. In particular, his theory of minima involves a detailed attempt to circumvent Aristotle's criticisms of comparable theories in *Physics* VI,⁶² and his treatment of void probably responds similarly to the arguments against void in *Physics* IV.⁶³ I have hitherto always assumed that the *Physics* was one Aristotelian text which, because of the threat it posed to atomism, Epicurus did take the trouble to study.⁶⁴ But in view of the pattern we have seen, it is only too likely that those Aristotelian criticisms reappeared in Theophrastus' doxographical reports of atomism, and once again that may well be the route by which they found their way to Epicurus.

Aristotle's own positive teachings appear to have been relatively neglected in the Hellenistic period.⁶⁵ It would be a curious irony if this proved to be largely due to the Hellenistic philosophers' reliance on Theophrastus' doxographical works, which excluded Aristotle from their scope.

Throughout this discussion, Theophrastus has featured as both a source and a catalyst for Epicurus' own arguments. He has not come

⁶¹ This view of *Nat.* XIV is shared by G. Leone 1984, 34 and elsewhere.

⁶² This was shown above all by D. Furley, *Two Studies in the Greek Atomists* (Princeton 1967). For further development of the same theme, cf. Long and Sedley 1982, §§9 and 11.

⁶³ See B. Inwood, "The Origin of Epicurus' Concept of Void," *CP* 76 (1981) 273–85.

⁶⁴ Not much can be made of Philodemus, *PHerc.* 1005, Fr. 111 (A. Angeli, *Filodemo, Agli amici di scuola* [Naples 1988] 166–67), in which a letter by a first-generation Epicurean, not necessarily Epicurus himself, is quoted as mentioning Aristotle's *Analytics* and *Περὶ φύσεως*. Even if one assumes that this latter is the *Physics*, there is no indication whether he has read it, or, if he has, at what date (the immediately following letter is dated 280/279, which would be too late to play a part in our story).

⁶⁵ I here declare a large measure of agreement with F. H. Sandbach, *Aristotle and the Stoics* (Cambridge 1985) [*Proceedings of the Cambridge Philological Society* Suppl. 10].

over as Epicurus' philosophical ally, and on most scores he could hardly be expected to do so. But it seems equally clear that Epicurus treated him with respect, recognising his objections to prevailing theories as ones which must be either accepted or answered. To confirm this, I will end by noting, and applauding, Jaap Mansfeld's recent success in charting just how much, in positive terms, Epicurus' work on meteorology owed to the Theophrastus meteorological text partially extant in Syriac and Arabic—more, indeed, than could be appreciated until recently, when Hans Daiber's full edition and translation were published.⁶⁶ Not only for many specific aetiologies and for the methodological principle of multiple explanation, but also for the exclusion of divine causes, Epicurean physics owes a direct and positive debt to Theophrastus.⁶⁷

⁶⁶ J. Mansfeld, "A Theophrastean Excursus on God and Nature and its Aftermath in Hellenistic Thought," *Phronesis* 37 (1992) 314–35; H. Daiber, "The *Meteorology* of Theophrastus in Syriac and Arabic Translation," in *Theophrastus: His Psychological, Doxographical and Physical Writings*, *RUSCH* 5, 166–293. The principal earlier study was E. Reitzenstein, *Theophrast bei Epikur und Lukrez* (Heidelberg 1924).

⁶⁷ These clear signs of respect for Theophrastus should be another nail in the coffin of Epicurus' image, based on a misunderstanding of the ancient tradition, as one who scorned all other philosophers and denied any debt to them. See my "Epicurus and His Professional Rivals," *Cahiers de Philologie* I (1976) 119–59. In particular, Epicurus' claim to be self-taught was no more than a denial that he had learnt anything from his two teachers, Pamphilus and Nausiphanes. As for Epicurus' directly critical work *Πρὸς Θεόφραστον* (Frr. 29–30 Usener), I must defer discussion of this to a future occasion.

For comments on earlier drafts, I am extremely grateful to Diskin Clay, Bob Sharples, David Runia, and other participants in the Leiden conference, and also to Jaap Mansfeld.

Theophrastus and the Stoa¹

A. A. Long

The comprehensive aim of the 1993 Theophrastus conference was to consider how the new collection of sources for Theophrastus, edited by Bill Fortenbaugh and his collaborators, affects our general impression of the philosopher's voluminous activities and influence.² As Aristotle's successor at the Peripatos, and as the senior contemporary of Epicurus and Zeno, Theophrastus was in an excellent position, it might seem, to straddle the two phases of Greek philosophy that we moderns call Classical and Hellenistic. He, if anyone (we might suppose), could set an agenda which younger philosophers, especially ones with the ambition to found new schools, would have to consider in establishing their independent identities. So far as Epicurus is concerned, David Sedley makes

¹ In revising this paper for publication, I am grateful to all those who contributed to the discussion at the Theophrastus conference in Leiden in July 1993, including especially my respondent, Ian Kidd, and Mario Mignucci, who gave me written comments. I have also benefited from talking about Theophrastus' *Metaphysics* with Gretchen Schils and Marlein van Raalte; to them in particular I apologise for treating complexities about physics so briefly. Above all I thank Jan van Ophuijsen. His questions and suggestions were a model of the help that a skilful editor can give to an author.

² W. W. Fortenbaugh, P. M. Huby, R. W. Sharples and D. Gutas, *Theophrastus of Eresus. Sources for his Life, Writings, Thought and Influence* (Leiden, New York and Köln 1992) [= FHS&G].

a powerful case in this volume for thinking that the founder of the Garden took careful note of some of Theophrastus' arguments in the field of physics. Were Zeno and his early Stoic followers similarly attentive to Theophrastus?

The publication of sources makes this question particularly pertinent. Large claims have been made over the past hundred years concerning Theophrastus' *positive* influence on all three divisions of Stoic philosophy—ethics, physics and logic. So far as I can discover, the new collection, splendid though it is, offers nothing that speaks directly and definitively to the question just posed. This amounts to saying that any attempts to answer it are bound to be circuitous, dependent on assumption and interpretation as well as evidence, much of which is silent. The inquiry also requires reference to material on Theophrastus, including his *Metaphysics*, that inevitably falls outside the Fortenbaugh collection. Still, it is timely to consider what the probabilities are concerning Theophrastus' role in the history and development of Stoicism.

The case I shall argue is that interaction between the Zenonian Stoa and Theophrastus, and his *positive* influence on Stoicism in its earliest years, were probably minimal. In making the case, I adduce evidence about physics and logic, though the topic I say most about is ethics. The fact itself may be very different from my tentative conclusion, but it seems better to present the negative case as sharply as possible, thus allowing those it does not convince a clear target. I attempt to motivate the case by considerations which concern the Stoa rather than Theophrastus. Maybe, as I would like to think, the earliest Stoics gave Theophrastus and all other serious thinkers in their environment an open-minded hearing. I do not conclude that they simply closed their ears, but that they thought they had reasons for going their own way and pretending ignorance, more or less, of the illustrious figure up the road.

Intellectual influence, of course, can be negative as well as positive, and it can also be so diffused that it becomes a talking-point or issue for debate rather than something clearly attachable to a named individual. Most Hellenistic philosophers shared a common agenda in discussing such issues as the goal of life, purposiveness in nature, causality and the determination of scientific truth. What I shall be questioning, in regard to Theophrastus' possible impact on the early Stoa, is not this community of topics, but whether Zeno and contemporary Stoics carved out positions that they could scarcely have adopted without the help of Theophrastean concepts or methodologies. The challenge I am issuing

is to the idea, that has often been mooted, of seeing Theophrastus as a thinker who partly anticipated and *thereby served to mediate* the primary development of distinctive Stoic doctrines.

My focus, as I have said, will be primarily on the earliest Stoicism, by which I mean Zeno and Cleanthes more than Chrysippus. Possibly Theophrastus left a stronger imprint on Chrysippus than on his Stoic predecessors; there is certainly more that could be said on this question than I attempt to cover in this paper. It must be admitted too that our record of Zeno and Cleanthes specifically is very meagre in comparison with our evidence for Epicurus. Still more important is the need to distinguish Theophrastus' relation to Stoicism around the years 300–280 B.C. from the context of those who lived at the time Aristotelianism was coming back into circulation after years of neglect. So I begin by surveying undisputable connections made between Theophrastus and Stoicism at the time of Cicero and Seneca.

I. Theophrastus' After-Life in Later (Post-Chrysippean) Stoicism

Among the things that certainly connect Theophrastus historically with the Stoa three relate to ethics. One of these is that, at least from the time of Cicero, presentations of Peripatetic ethics which include explicit reference to Theophrastus are influenced by Stoic terminology and doctrinal interests. A clear example is 449A FHS&G.³ This passage of Stobaeus (2.140.7–142.13 Wachsmuth) is mainly a report of how Theophrastus treated the ethical “mean.” The passage ends, rather inconsequentially, by explaining the *antakolouthia*, the “mutual entailment,” of the ethical virtues and *phronêsis*. What is here attributed, or perhaps merely tagged on, to Theophrastus is Aristotelian in substance (cf. *EN* 6, 1144b30–1145a2) and doubtless doctrinally correct for Theophrastus, but the formulation is at least partially Stoic.⁴

³ This is L 12 in W. W. Fortenbaugh, *Quellen zur Ethik Theophrasts* (Amsterdam, 1984). Hereafter I append the fragment numbers of this edition, which are preceded by the letter L, to those supplied in FHS&G when referring to the evidence concerning Theophrastus' ethics.

⁴ The Stoics appear to have coined the term *antakolouthia* and related forms; cf. *SVF* 2.349, 3.275, 295, 299, 302. On the interpretation of “mutual entailment,” cf. A. A. Long and D. N. Sedley, *The Hellenistic Philosophers*, vol. I (Cambridge 1987) 384.

A second certainty about Theophrastus and the Stoa is that some of his ethical theses were criticized or approved by Roman writers of a Stoic persuasion: cf. Seneca, *De ira* 1.12.3 (446 FHS&G = L 10) on the (in)compatibility of anger with virtue, and Marcus Aurelius 2.10 (441 FHS&G = L 4), who praises Theophrastus for treating anger as less blameworthy than appetite.⁵ As a third certainty, we can say that the quasi-Stoic, but officially Academic, Antiochus of Ascalon presented himself as a *qualified* supporter of Theophrastean ethics (Cicero *De Fin.* 5.12 = 498 FHS&G = L 58): *Theophrastum ... adhibeamus ad pleraque*, says Cicero's Academic spokesman Piso, who was a follower of Antiochus (*De Fin.* 5.6–8, 14, 75, 80). However, a few lines earlier Piso insists on taking "Aristotle and his son Nicomachus" as his primary authorities on the grounds that Theophrastus, in his work *On happiness*, assigns too much weight to fortune. Cicero's Piso, then, does not claim more than secondary dependence on Theophrastus in *De finibus* 5.

What these three certainties amount to is that Theophrastus' after-life in ethics has dialectical and doxographical connections with late Stoicism. Unfortunately, the strong imprint of Stoicism and Antiochus on *De finibus* 5 makes it very difficult to disentangle what may be distinctively Theophrastean in this text.⁶ Still, so far as the later Stoic tradition

⁵ Theophrastus is probably an unnamed presence among the Peripatetics whose opinions on the usefulness of passions are discussed by Cicero in *Tusc. Disp.* 4; cf. Fortenbaugh 1984 on L 10.

⁶ In "Beobachtungen zu Ciceros philosophischem Standpunkt," in *Cicero's Knowledge of the Peripatos* [RUSCH 4], ed. W. W. Fortenbaugh and P. Steinmetz (New Brunswick, NJ 1989), Peter Steinmetz observes (19): "Eine befriedigende Analyse dieser Rede Pisos ist noch nicht vorgelegt." In the same volume Olof Gigon makes an impressive attempt to fill this gap: "Theophrast in Ciceros *De finibus*," 155–89 (cf. also Gigon's earlier essay: "The Peripatos in Cicero's *De finibus*," in *Theophrastean Studies on Natural Science, Physics and Metaphysics, Ethics, Religion, and Rhetoric* [RUSCH 3], ed. W. W. Fortenbaugh and R. W. Sharples (New Brunswick, NJ) 259–71. Gigon is well aware of the fact that whatever is Theophrastean (and Aristotelian) in *Fin.* 5 has passed through Antiochus' syncretistic mill. However, he writes confidently about the Peripatos as the originator of the "entscheidende Begriff der Entwicklung und des kontinuierlichen Fortschreitens (*prokope*)," proposing that the Stoa inherited these doctrines (163). He also thinks that Theophrastus is responsible for the biology found in *De Fin.* 5.39–40 and for the focus on the "cradle argument" at 5.55. Piso, to be sure, says here: *omnes veteres philosophi, maxime nostri, ad incunabula accedunt, quod in pueritia facillime se arbitrentur naturae voluntatem posse cognoscere*. However, Piso also attributes the associated concept of *oikeiosis*, from which he begins his exposition, to the *veteres, quo etiam Stoici utuntur* (5.23). If this attribution to the *veteres* is unhistorical, as it surely is, it is hazardous to attribute the cradle argument to Theophrastus. See further, J. Brunschwig, "The Cradle Argument in Epicureanism and

in ethics is concerned, the after-life of Theophrastus is of some importance.

To the extent that we count Seneca a Stoic in his *Quaestiones naturales*, we can add Theophrastus' fairly frequent presence in that work as a fourth certainty connecting him to the Stoa.⁷ That Stoics interested in natural science will have had to turn to Theophrastus from time to time seems highly probable. However, Ian Kidd has succeeded in showing that in meteorology Posidonius, the most scientific of all Stoics, "turns out to be far more Aristotelian than Theophrastus is."⁸ I my-

Stoicism," in *The Norms of Nature*, ed. M. Schofield and G. Striker (Cambridge and Paris 1986) 113–44..

De Fin. 5 certainly emphasizes general biology, including that of plants, to a degree that is not paralleled in extant Stoic material. I am not suggesting that Antiochus has no genuine reminiscence of Peripatetic ideas that originated with Theophrastus. But what tells most plainly in favour of Antiochus' Stoic foundations is his account of the virtues (cf. 5.38, 5.67). This is Stoic through and through, with no trace of the Aristotelian "mean," a doctrine that Theophrastus appears to have fully endorsed (cf. 449A FHS&G = L 12). I also think that Antiochus' interesting developmental treatment of human excellence is largely his own rejoinder to the Stoics. If it were Theophrastean, we should have to credit Theophrastus with a concept of the *prima naturae*. Yet the background to that concept, in Piso's exposition, is the *Carneadia divisio* (5.16–19), *qua noster Antiochus libenter uti solet*. Those who are optimistic about distilling an early Peripatetic essence from *De finibus* 5 may be more persuaded than I am by the findings of G. Magnaldi, *L'οἰκείωσις peripatetica in Ario Didimo e nel 'De finibus' di Cicerone* (Torino 1991).

⁷ For doubts that Seneca had direct access to Theophrastus' *Meteorology*, cf. H. Daiber, "The *Meteorology* of Theophrastus in Syriac and Arabic Translation," in *Theophrastus: His Psychological, Doxographical, and Scientific Writings* [RUSCH 5], ed. W. W. Fortenbaugh and D. Gutas (New Brunswick, NJ 1992) 292, and I. G. Kidd, "Theophrastus' *Meteorology*, Aristotle and Posidonius," *ibid.*, 298 n. 2. Cf. most recently J. Mansfeld, "A Theophrastean Excursus on God and Nature and its Aftermath in Hellenistic Thought," *Phronesis* 37 (1992) 314–35, esp. 328–29.

⁸ See Kidd (above, n. 7) 294–306, where he studies Posidonius in relation to the Syriac and Arabic reports of Theophrastus' meteorology, published by Hans Daiber in the same volume of RUSCH. In his commentary on Posidonius (Cambridge 1988) vol. II, 84ff., Kidd has marshalled the evidence for Posidonius' familiarity with Aristotle's *Meteorology*. In his article (op. cit. 304) he suggests that the Theophrastean meteorology "seems to have had some impact on the early Stoa," i.e. Zeno and Chrysippus. I confess to scepticism about this proposal, on the basis of the evidence Kidd cites. It is true, as he says, that DL 7.153 (in the doxography of Stoic meteorology) makes cloud-banging the explanation of thunder, which agrees with what is apparently a common factor in the multiple Theophrastean explanations advanced (Daiber 1992, 261–62). This explanation is also found in Epicurus, *Ep. Pyth.* 100 and Lucretius 6.96ff., and the only other attestation, apparently, is Aristophanes, *Clouds* 383. However, the order of meteorological topics in DL 7.151–54, and the explanations advanced for most of them, do not coincide with the Theophrastean material. Nor do I think that much can be made

self have found only one occurrence of Posidonius' name in the new collection of sources for Theophrastus (above n. 2)—the passage designated 171 FHS&G. This text is an extract from Simplicius' commentary on *De caelo* 4.3. Simplicius claims that one way of dividing the four elements, according to Aristotle and Theophrastus in the latter's *On the generation of the elements*, is to treat the heavy and cold ones (i.e., earth and water) as matter, and the light and hot ones (i.e., air and fire) as form. "Posidonius," says Simplicius, "takes this procedure over from them and uses it everywhere." As Ian Kidd points out in his volume of commentary on Posidonius Fr. 93a, Simplicius' testimony is difficult to square with the well-attested fact that the Stoics treated air as cold, a doctrine which Posidonius himself seems to endorse elsewhere. Kidd could also have mentioned that Theophrastus too treats air as naturally cold in *De igne* 26. Simplicius' allusion to Posidonius here, garbled though it may be, could suggest his awareness of the tradition that Posidonius was much given to Aristotelizing (Strabo 2.3.8 = T 85 Kidd). Even so, Simplicius' evidence does not privilege Theophrastus over Aristotle. Judging from the indices to Kidd's commentary and edition, Theophrastus' demonstrable influence on Posidonius is scarcely evident.

The certainties I have mentioned thus far can hardly be taken as exhaustive, so far as Theophrastus' after-life in relation to later Stoicism is concerned. According to Cicero (*De Fin.* 4.79 = 56 FHS&G), Panaetius was always citing Plato, Aristotle, Xenocrates, Theophrastus and Dicaearchus. A further certainty or probability is that Diogenes of Babylon was responding to Theophrastus in adding "conciseness" to the four virtues of style already specified by the Peripatetic philosopher.⁹ Quite likely there are similar items that I have missed. However, at this point I turn to the issue that principally concerns me in this paper—Theophrastus' relationship to the Stoa, and its relationship to him, during the earliest years of Stoicism.

of the fact that Chrysippus is attested to have made thunder and lightning simultaneous (Aëtius 3.3.13), a claim which Theophrastus included in his second explanation (Daiber op. cit., 263) of our seeing lightning before we hear thunder.

⁹ DL 7.60 (SVF 3.24 Diog.); cf. F. H. Sandbach, *Aristotle and the Stoics* (Cambridge 1985) [= *Proceedings of the Cambridge Philological Society*, suppl. vol. 10] 15.

II. The Absence of Evidence Directly Attesting to Interaction between Theophrastus and the Early Stoa

At the outset two further certainties need to be emphasized. First, in no text or testimony does Theophrastus refer in his own identity to any Stoic philosopher or Stoic doctrine. In addition, as Sandbach observed (1985, 12): "There is no external evidence of a connection between any early Stoic and a member of the Peripatos." From the first generation of Stoics we have disparaging anecdotes about Theophrastus by Zeno (Plutarch, *Prof.* 78D = 15 FHS&G) and about the Peripatos in general by Cleanthes (DL 7.173). There is also a possible reference by the renegade Stoic Dionysius of Heraclea to Theophrastus' work *Callisthenes*.¹⁰

Is this lack of external testimony significant? Jonathan Barnes has written: "There is no direct evidence in the biographical tradition that the great Stoics 'heard' their Peripatetic contemporaries. But it must be thought probable, on general grounds, that they were aware of the views promulgated in the Lyceum."¹¹ I totally agree. The Peripatetics, as Barnes writes, "were not intellectual anchorites, nor were they obsessively secretive about their views." Only a few hundred yards, as he also notes, separated the Lyceum from the Stoa. Indeed, the anecdotes I have mentioned are sufficient to show that the earliest Stoics were believed to have taken note of their Peripatetic neighbours. The issue is not one of awareness of views, in my opinion, but of what Theophrastus and the earliest Stoics chose to do with such knowledge as they had of one another's philosophy and interests. Is it possible, I want to ask, that they ignored one another, at least for the most part? Did they scarcely engage in controversy or hardly seek, except tacitly perhaps, to exhibit their differences or agreements? These questions may seem extreme, but I think it is worth at least considering where they might lead us in explaining the silence of our sources.

To set a context for these questions, or rather for my last pair of certainties—concerning the mutual silence of Theophrastus and the early

¹⁰ Cf. Cicero, *Tusc. Disp.* 3.21, with discussion by Sandbach 1985, 13–14.

¹¹ "Theophrastus and Hypothetical Syllogistic," in *Theophrastus of Eresus: On his Life and Works* [RUSCH 2], edd. W. W. Fortenbaugh, P. M. Huby, A. A. Long (New Brunswick, NJ 1985) 138.

Stoa about each other—I want to make three general points. The first of these relates to claims made over the past hundred years about Theophrastus' positive influence on all the main branches of Stoic philosophy in its early stages. He was long believed, and may still be believed in certain quarters, to have originated the concept of *oikeiôsis*. If that were so, the grounding of Stoic ethics would have been anticipated by him. He has also been seen as foreshadowing and perhaps influencing the creation of Stoic logic. In addition, some scholars have said that Theophrastus helped to shape a number of the Stoics' physical theories. Any one, or indeed all, of these claims is compatible with the silence of our sources. There was no copyright on philosophical views in antiquity, and no expectation of acknowledging indebtedness. If, however, early Stoic philosophy is more different from Theophrastus than it is similar, we are relieved from the need to conjecture positive influences that are neither attested nor, as I think, implied by anything we know about Zeno or Cleanthes.

The second general point I want to make concerns the absence of external evidence connecting the early Stoa and Theophrastus. Making all allowance for the vagaries of ancient biography and the paucity of early Stoic texts, I do find it significant that we are told something about the formative influences on Zeno from a number of different philosophical movements—the Cynic Crates, Stilpo and other dialecticians, and the Academy of Polemo (cf. DL 7.2–3). We also hear in some detail about Zeno's and Aristo's controversies with Arcesilaus, the sceptical successor of Polemo and Crates at the Academy.¹² We know enough about early Stoic philosophy to see that these encounters are not only historically plausible but also genuinely explanatory. The absence of any attested contact between the Peripatetics and the Stoa does seem to be significant, especially when there is evidence that Arcesilaus briefly attended lectures by Theophrastus (Numenius, Fr. 25 Des Places = 16 FHS&G) who was also the subject of a work in two books by Epicurus (Plut., *Adv. Col.* 1110C = 280 FHS&G). Theophrastus, for his part, was apparently interested enough in the Cynic Diogenes to compile a collection of his sayings (DL 5.43). If Theophrastus ignored Zeno, the presumption must be that he had reasons for doing so.

My third general point has to do with the Stoics' relation to Aristotle

¹² Cf. A. A. Long, "Diogenes Laertius, Life of Arcesilaus," *Elenchos* 7 (1986) 429–50.

and the Peripatos quite generally. This is an enormously complex question, which has become very controversial in the wake of the negative thesis propounded by Sandbach in his monograph, *Aristotle and the Stoics* (1985, 24–28). Sandbach's principal point (57) is that "such indications as there are point only rarely to Aristotle as the probable, let alone the certain, origin of Stoic doctrines." Sandbach holds "even more strongly that it is a mistake to proceed on the a priori assumptions that the Stoics must have known the opinions expressed in [Aristotle's] school-works, must have understood his importance sub specie aeternitatis, and must therefore have been influenced by him." Sandbach discusses Theophrastus only incidentally, but his general message is clear: the Peripatos in general was of little or no significance for the development of Stoic philosophy.

Sandbach's position is extreme. But I think he was right to insist that the burden of proof should rest on those who posit Peripatetic influence on the Stoics rather than on those who would deny it. That having been said however, he went much too far in certain respects. He was unduly persuaded, in my opinion, by considerations to do with the availability of texts. This may be relevant for Chrysippus, in the second half of the third century, but Zeno and his immediate followers could surely have acquired some knowledge of school treatises by Aristotle and Theophrastus, if and when they wanted to do so. I strongly doubt whether the content of such treatises was completely unknown or inaccessible to persons outside the Peripatos.

Sandbach also demanded unreasonably high standards of proof from those who propose Aristotelian influences, while settling for much lower standards in defending the influence on Stoicism of such Academic figures as Xenocrates. In regard to ethics, I concede to Sandbach that the case for making Aristotle as influential as I once believed him to be is scarcely conclusive.¹³ It remains true, none the less, that we can

¹³ Sandbach (1985) devotes several pages (24–28) to criticizing my article, "Aristotle's Legacy to Stoic Ethics," *BICS* 15 (1968) 72–85, now reprinted in *Classical Philosophy Collected Papers*, vol. V: *Aristotle's Ethics*, ed. T. H. Irwin (New York 1995) 378–91. In this study I tried to prove that the Stoics developed some of their central ethical concepts as a result of reflecting on Aristotelian ideas that are transmitted in his extant treatises. Without excluding my results as a possibility, Sandbach argues that in no case are they necessary. Everything in Stoic ethics that I had sought to explain by reference to Aristotle could be just as well or better explained by presuming that the Stoics were primarily inspired by Plato and the Academy. I continue to think that the connections I drew between Aristotle and the Stoics were worth making, so far

learn a great deal about the concepts deployed in Greek ethics by comparing Aristotelian and Stoic doctrines.¹⁴ Sandbach also went much too far, in my opinion, in suggesting that the Stoics (and here I think particularly of Chrysippus) may have owed nothing to Aristotle in developing their physics. I do not for a moment believe that the Stoic concept of *hylê* and some other doctrines (especially those to do with mixture, cosmology and psychology) were developed in total ignorance of all Aristotelian ideas.¹⁵

as philosophical analysis and mutual illumination are concerned; but I grant to Sandbach that the Stoics *need not* have had Aristotle in mind, at least to the degree that I thought I could demonstrate. However, Sandbach has not convinced me that the Stoics proceeded in *total* ignorance of Aristotle's ethical treatises. What I would now say (and indeed have never denied) is that they were *primarily* influenced by Socrates, in his Platonic, Xenophontic and Cynic representations.

¹⁴ There is no question that Aristotle, Epicurus and the Stoics share a common stock of concepts in ethics, which they all use as the formal components of their ethical theories: good and bad, virtue, pleasure, *eudaimonia*, *telos* etc, cf. my paper, "Stoic Eudaimonism," in *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 4 (1989), ed. J. Cleary, 77–101; reprinted in my book *Stoic Studies* (Cambridge 1996) 179–201. It is precisely this common ground which makes philosophical comparison between these schools profitable. However, our historical basis for comparing them may have less to do with Aristotle's direct influence on Zeno and Epicurus than with their independent agreement that this is the way to do philosophical ethics. The Academy and the Socratic tradition are likely to have been the pioneers here, an hypothesis that will help to account for the Cyrenaics' attested use of the same range of formal concepts (cf. DL 2.86–93). It is also worth noting, in regard to the Stoics' concept of *oikeiôsis* (which was almost certainly developed in opposition to Epicurean hedonism, cf. DL 7.85, Seneca, *Ep.* 121.6ff.), how closely Epicurus anticipates the Stoics in his use of such terms as ἀγαθὸν συγγενικόν/σύμφυτον, διὰ τὸ φύσιν ἔχειν οἰκείαν (*Ep. Men.* 129–30), κατὰ τὸ τῆς φύσεως οἰκείον (*KD* 7). Other attempts to demonstrate Aristotelian influence on Stoic ethics include T. Irwin, "Stoic and Aristotelian Conceptions of Happiness," in *The Norms of Nature*, ed. M. Schofield and G. Striker (above, n. 6), 205–44, and "Virtue, Praise and Success: Stoic Responses to Aristotle," *The Monist* 73 (1990) 59–79, and—much more cautiously—E. Schütrumpf, "Verteidigung natürlicher Strebungen—zu den Vorstufen der stoischen Ethik," *Antike und Abendland* 39 (1993) 48–63.

¹⁵ Sandbach's thesis has not disposed me to retract what I wrote about Stoic responses to Aristotle in "The Stoics on World-conflagration and Everlasting Recurrence," in *The Southern Journal of Philosophy* 23 suppl. (1985) 14–20, 24–25. In regard to the Peripatetic connotations of ἀποιοσ οὐσία (or ὕλη), as the Stoic passive principle is sometimes called (*SVF* 1.85, 2.301, 318) cf. H. J. Krämer, *Platonismus und hellenistische Philosophie* (Berlin and New York 1971) 122. I cite Krämer here because his study of the prehistory of the Stoic twin principles (108–22) is one of the best things that has been written on the topic. Krämer argues that it was the post-Platonic Academy, and not the Peripatos, which *primarily* influenced the Stoics' formulation of their active and passive *archai*.

Whether the early Stoics learned about Aristotelian concepts and doctrines through written texts or through word of mouth including that of Theophrastus we shall doubtless never know. However—and this is the point I want to emphasize—natural science, though important to Zeno and Cleanthes, was hardly their major preoccupation. Zeno himself may have written only a single work on this topic, the one entitled *On the whole* (i.e. the universe). What chiefly interested him and his contemporary followers was ethics, though Zeno also wrote five books of *Homeric Problems*.¹⁶ Sandbach fails to register these points, and thereby misses the principal reason, I think, why the earliest Stoics who could have heard Theophrastus seem to have taken little interest in the detailed work of the Peripatos under his direction—less interest, I conjecture, than they probably took in Aristotle himself.

That reason, to be more specific, is the fact that Zeno's philosophical hero and professed model was Socrates. Elsewhere I have attempted to show that attitudes to Socrates were a decisive factor in the self-definitions of the Hellenistic schools.¹⁷ The Epicureans were notoriously hostile to Socrates. Some Peripatetics were also critical of his life, includ-

¹⁶ Zeno's *Περὶ τοῦ ὅλου* is the only work of his on natural philosophy that DL 7.4 cites in his catalogue of Zeno's works or to which he refers by name in his doxography (cf. 7.135–36, 143, 153–54). We are given no indication that the work was in more than one book. In the absence of other evidence, I infer that it is the same work which underlies the reference to his book *On nature* (SVF 1.176). Zeno also wrote a work entitled *Pythagorica* (DL 7.4), which suits the probably Academic/Pythagorean inspiration of his doctrine of active and passive principles (cf. Sandbach [above, n. 9] 37). For Zeno's work on Homer, cf. my article, "Stoic Readings of Homer," in *Homer's Ancient Readers. The Hermeneutics of Greek Epic's Earliest Exegetes*, ed. R. Lamberton and J. J. Keaney (Princeton 1992) 41–66; reprinted in *Stoic Studies* (above, n. 14) 58–84.. The testimonies for the works composed by Zeno's immediate followers are organized according to the order, physics, ethics, logic. In the case of Aristo, Persaeus and Dionysius of Heraclea, the subject-matter is confined to ethics, except that Aristo wrote a work *On Zeno's Doctrines* (DL 7.162). The list for Cleanthes (DL 7.174) begins with a work *On time* and two books *On Zeno's physiologia*; these are followed by four books of *Interpretations of Heraclitus* and a work *On aisthesis*. Cleanthes also wrote a book *Against Democritus* (cf. below, n. 50). That appears to be the main extent of Cleanthes' attested works on physics. His contributions to ethics are far more extensive. In the case of Sphaerus (DL 7.178), the list begins with a work *On the cosmos* in two books. This is followed by works *On elements*, *On seed*, *On chance*, *On minima*, *On atoms and eidola*, *On sense organs* and five discourses *On Heraclitus*. The list next deals with Sphaerus' ethical writings, which included a work in three books *On Lycurgus and Socrates*, and a work on a Socratic sect, *The Philosophers of Eretria*.

¹⁷ "Socrates in Hellenistic Philosophy," *CQ* 38 (1988) 150–71; reprinted in *Stoic Studies* (above, n. 14) 1–33.

ing Aristoxenus especially (Fr. 51 Wehrli) but also Callisthenes, Demetrius of Phalerum, Satirus (Athenaeus 555D) and Hieronymus of Rhodes (Plutarch *Aristides* 335C–D). These attacks on Socrates were later answered by the Stoic Panaetius (Plutarch *ibid.*). There is no evidence that Theophrastus agreed with his overtly anti-Socratic colleagues. But it should be noted that in the surviving material he is completely reticent about Socrates and Socratic theses. We can probably assume that Theophrastus, unlike the Stoics, had no sympathy for Socrates' ethical paradoxes, and that he did not endorse Socrates as the paradigm of how a philosophical life should be lived. The Hellenistic tendency was to regard Socrates as exclusively a moral philosopher, who would scarcely have been at home in the research environment of the Lyceum. This point about Theophrastus and Socrates helps to provide a motivation for lack of dialogue between Theophrastus and the early Stoa.

The two schools where Socrates was thoroughly at home during Theophrastus' later life were the newly established Stoa and the Academy. Zeno's controversies with Arcesilaus were not simply intellectual differences over epistemology, or so I believe. Zeno and Arcesilaus were competing for the title of Socrates' philosophical legacy, a know-nothing but morally irreproachable Socrates, in the case of Arcesilaus, and a Socrates who was the nearest thing to a wise man (someone with infallible moral knowledge) in the case of Zeno. Those controversies occurred after the death of Theophrastus, in all probability. Yet while he was still alive, I think, the Academy under Polemo (Zeno's mentor) had been asserting its Socratic identity, possibly as a way of distancing itself from some of the doctrinal Platonism we associate with Speusippus and Xenocrates. As we can see from the deviant theories of the Stoic Aristo, there were disagreements between him and Zeno about how the Stoics should present themselves, in their enterprise, as I suppose, to be the true heirs of Socrates. Zeno, it appears, thought that he could combine a Socratic identity with a philosophy that included some physics and logic. Aristo, by contrast, "confined the scope of philosophy to ethics, urging that physics is beyond human powers, and that dialectic is irrelevant since it does not contribute to the correct regulation of life" (*SVF* 1.352). We may probably see Zeno's Socrates as broadly early-Platonic

(though Zeno was strongly critical of Plato's metaphysics and politics), and Aristo's Socrates as mediated more strongly by Antisthenes and Diogenes.¹⁸

As philosophers "who were willing to be called Socratics" (cf. Philodemus, *De Stoicis* cols. 12–13), the earliest Stoics were probably concerned from the outset to distance themselves from any philosophical connections that might seriously compromise or blur that allegiance. With Theophrastus, it is true, they shared an interest in writing on such ethical and political topics as pleasure, good fortune, kingship, gratitude, erotic love, friendship and law.¹⁹ The common ground tells us something interesting about early Hellenistic culture, but virtually nothing is known about the content of the Stoic works. My guess is that their authors treated such material along lines that Zeno had already pioneered. Let us ask, then, whether Theophrastus and Zeno could have had an interesting basis for learning from or arguing against one another? I will try to answer this question in some detail with reference to ethics.

III. Theophrastus and Stoic Ethics

To judge by the titles of Theophrastus' extensive works and what has survived from them, ethics came third in the preference of his interests, with physical science coming first and logic second. We have every reason to think that Theophrastus was basically Aristotelian in his ethics, and no radical like Zeno and Epicurus. The radical thing about Zenonian and Epicurean ethics was the promise of both schools to deliver a conception of happiness, grounded in theories of human and cosmic nature, that was entirely independent of external contingency. On this latter

¹⁸ As I noted in *CQ* 38 (1988) 164, Anna Maria Ioppolo, in her fine book *Aristone di Chio e lo stoicismo antico* (Napoli 1980), makes Socrates' importance to Aristo clear; but I don't think that she anywhere suggests, as I do (*loc. cit.*), that Aristo thought that the Cynic tradition of Socrates was truer to the spirit of the philosopher than tendencies which Zeno was initiating.

¹⁹ Compare DL 5.42–50 (the catalogue of Theophrastus' works) with the books attributed to Dionysius of Heraclea (DL 7.166), Persaeus (DL 7.36), and Cleanthes (DL 7.174). Note too Zeno's interest in the instructional value of poetry, and his writing on such topics as law and Greek education (DL 7.4).

point, the invulnerability of the *sophos*, Stoics and Epicureans were more or less in agreement. By contrast, nothing is more strongly emphasized in our evidence for Theophrastus' ethics than his insistence that all human beings are vulnerable to fortune. This point is stated or implied in at least six of the principal ethical theses we can attribute to him:

- 1 Virtue is not sufficient for happiness (495–99 FHS&G = L 55–59).
- 2 Virtue can be lost (462 FHS&G = L 20).
- 3 Praise and blame are relative to opportunity and education (465 FHS&G = L 29).
- 4 External contingency can adversely affect moral character (463 FHS&G = L 21).
- 5 Good education and development of good habits are necessary conditions of becoming virtuous (465 FHS&G = L 29).
- 6 It is difficult to decide on, to choose and to stick to the best life (476 FHS&G = L 38).

Aristotle would probably have agreed with all of these propositions, but if the Ciceronian tradition is reliable Theophrastus was more emphatic than his master in conceding the power of chance to wreck happiness (cf. 495–99 FHS&G). In doing so, Theophrastus was not only, as I would say, being attractively realistic and humane;²⁰ he was also in line with a powerful sentiment of his epoch, which was echoed and intensified in the pessimism attributed to the contemporary Cyrenaic Hegesias. This philosopher even denied the possibility of happiness, partly on the ground that fortune frequently frustrates one's hopes (cf. DL 2.94). Already in the *Republic* (6, 496B–E) Plato had emphasized the societal and political impediments to achieving philosophical wisdom and happiness in the world as we know it. Yet he seems to have believed that these impediments were successfully circumvented by Socrates. The message of Antisthenes and the Cynics, which Zeno took over, was that virtue (i.e. a Socratic disposition) is sufficient for happiness since happiness needs nothing in addition to virtue except Socratic strength (DL 6.11).

Although Zeno was not credited with the perfect virtue and happiness of the Stoic sage, his close approximation to that ideal emerges from the way the biographical tradition emphasizes his self-mastery, his *enkrateia* and *sôphrosunê*, especially in regard to bodily endurance and

²⁰ He acknowledged the universal desire for happiness; cf. 475 FHS&G = L 37, with Lambinus' emendation.

frugality. It was for these qualities that Zeno became proverbial at Athens, and they are the principal theme of poems composed in his honour (DL 7.27–30).²¹ According to Xenophon *enkrateia* (manifested especially in reference to things affecting the body) had been Socrates' dominant characteristic.²² As time went by, of course, some Stoics were prepared to concede that even virtue might be at least temporarily affected by mental derangement (cf. DL 7.127). Yet with this exception, Chrysippus in the third generation of Stoics will have had little or no sympathy for Theophrastus' concessions to fortune. According to Chrysippus (Aulus Gellius 7.2.6–13), those who lack a good education are not exonerated from wrong-doing that they commit intentionally. Although the early Stoics acknowledged that 'corruption' (*diastrophê*) has its primary causes in external circumstances, they did not, I think, stress the contribution of education in the manner of Aristotle and Theophrastus. The guidance of nature—the rational understanding that it is *natural* for any mature person to acquire—is the most basic condition for acquiring Stoic virtue and happiness.

Happiness as invulnerability and purely rational self-sufficiency, anchored to a Socratic understanding of the virtues as *epistemic* dispositions—these early Stoic conceptions have nothing in common with Theophrastean ethics or with the Aristotelian mean that appears to have been his principal moral doctrine (cf. above, n. 6). Conceivably, dissatisfaction with Theophrastus and Peripatetic ethics was one of Zeno's philosophical stimuli. It seems at least as likely, on the other hand, that Zeno arrived at his own position in the ways that the biographical tradition suggests, through the influence of Socratic literature and the Cynics. In this case, the radical alternative to Peripatetic ethics that he offers was probably the outcome of an allegiance to the Socratic tradition, fostered for the most part independently of other influences.

The Stoics, as I just mentioned, specified nature (i.e. the rational understanding or harmony that conforms to a mature human being's nature) as the norm of action. If they were asked whether Socrates had

²¹ For further discussion, cf. Fernanda Decleva Caizzi, "The Porch and the Garden: Early Hellenistic Images of the Philosophical Life," in *Images and Ideologies: Self-Definition in the Hellenistic World*, ed. A. W. Bulloch, E. S. Gruen, A. A. Long, and A. Stewart, 303–29 (Berkeley and Los Angeles 1993), and my article, "Hellenistic Ethics and Philosophical Power," in *Hellenistic Culture and History*, ed. P. Green (Berkeley and Los Angeles 1993) 138–56.

²² Cf. e.g. *Mem.* 1.2.1; 1.5.5. Xenophon was probably influenced by Antisthenes.

subscribed to a similarly naturalistic ethics, there are numerous Platonic texts which they could have adduced (e.g. *Gorgias* 506E and *Republic* 1, 335D, 353D). Still, one might observe, Plato's Socrates does not speak of "nature" (*phusis*) in these contexts, *expressis verbis*. Was Zeno, in formulating his ethics, influenced by the terminology and thought of the contemporary Academy or Peripatos, or by both of these schools, as Plutarch (*Comm. not.* 1069E–F = 501 FHS&G = L 61) alleges in an attack he makes on Chrysippus? A number of scholars, including Bill Fortenbaugh, have suggested that Theophrastus himself attributed a normative function to nature and may thus have helped to stimulate the development of an ethics of what accords with nature.²³ Is this suggestion plausible? Can it be illuminated by comparison with Stoicism?

In two ethical testimonies Theophrastus makes use of the expression *kata phusin*. In 507 FHS&G = L 70, a scholion on Plato, *Laws* 631C, Theophrastus says:

"If wealth had life, it would go only to men who are good. For each thing seeks its own good (*oikeion agathon*), and for wealth it is good to become the tool of good men. For what is good for each thing is also desirable (*epheton*), and this is also according to nature (*kata phusin*) for it. All things strive for the condition which is in accordance with nature."

The logic of this passage depends upon relationships between four concepts—*ephetos*, *agathos*, *oikeios* and *kata phusin*. For a more or less exact parallel, we need look no further than Plato, *Lysis* 221D where the object of desire is identified with what is *phusei oikeion*.²⁴ I find nothing innovative or prescient for Hellenistic philosophy in this Theophrastean statement. Aristotle too (in *EE* 8.3) talks of *agatha* that are *phusei*, in reference to honour, wealth, bodily excellences and the goods of fortune.²⁵

²³ Cf. Fortenbaugh's commentary on Plutarch's text (228), with the other scholars he cites ad loc.: F. Dirlmeier, "Die Oikeiosis-Lehre Theophrasts," *Philologus Suppl.* 30 (1937) 4–46; O. Regenbogen, "Theophrastos," *RE Suppl.* VII (1940) 1494; P. L. Donini, *La filosofia Greca dal VI al IV Secolo, Storia della Filosofia* III (Milano 1975) 344.

²⁴ Cf. C. O. Brink, "Plato on the Natural Character of Goodness," *HSCPh* 63 (1958) 193–98.

²⁵ For persuasive arguments that Theophrastus' work in ethics was closely related to Aristotle's *EE*, cf. W. W. Fortenbaugh, "Arius, Theophrastus, and the *Eudemian Ethics*," in *On Stoic and Peripatetic Ethics: The Work of Arius Didymus* [RUSCH 1], ed. W. W. Fortenbaugh (New Brunswick, NJ 1983) 203–23, with comments by A. Gotthelf, 224–36.

In the second passage Stobaeus (2.141.5–11 = 449A FHS&G = L 12), reporting Theophrastus' analysis of the ethical mean, attributes to him the claim that:

"The man who lacks appetites is like a stone and does not even aim at *the things according to nature* ... the man intermediate between the *anepithumêtos* and the *akolastos* ... is called *sôphrôn* and is in accordance with nature."

This passage, unlike the Plato scholion, includes an expression which is genuinely Stoic sounding: "the things according to nature" (*ta kata phusin*) is Stoic jargon for the set of "indifferent" but "preferred" things (*adiaphora/proêgmena*)—health, wealth etc.—which rational beings have a natural impulse to pursue. The text also makes being "in accordance with nature" a defining attribute of the man who has the virtue of *sôphrosunê*. Does this testimony suggest that Theophrastus attributed to nature a normative function of a kind that prefigures the Stoics?

My first response to this question is to point out that the same testimony of Stobaeus later includes the Stoic sounding term *antakolouthia*, which I mentioned at the beginning of this paper. It is distinctly possible that Stobaeus' source, in writing *ta kata phusin*, has also been influenced by Stoicism; Theophrastus may have used a different expression, for instance, *ta phusei agatha*, as in Aristotle.²⁶ Secondly, the *sôphrôn* is the only type of virtuous person who is characterized as being "in accordance with nature." I find it probable that this description is decisively influenced by the fact that the *sôphrôn* desires "natural things." The text does nothing to suggest that "natural" is a predicate to be supplied in the description of every virtue designator.

However, these points would be insignificant if we had unimpeachable evidence that "living in accordance with nature" was a central concept for Theophrastus. During the first half of this century a number of distinguished German scholars (von Arnim, Dirlmeier, Regenbogen, and Walzer) believed that they did have such evidence.²⁷ A prime item to which they appealed was Porphyry's attribution to Theophrastus (*De*

²⁶ Note too that Aristotle uses κατὰ τὴν φύσιν in the parallel text at *EE* 2.3, 1221a 21–22.

²⁷ In addition to Dirlmeier loc. cit. and Regenbogen (1940, 1493–98), cf. the similar tendency of the earlier studies by H. von Arnim, *Arius Didymus' Abriss der peripatetischen Ethik*, *Akad. der Wiss zu Wien, phil.-hist. Kl.* 204.3, 1926 and R. Walzer, *Magna Moralia und aristotelische Ethik* (Berlin, 1929) [= *Neue Philologische Untersuchungen* 7].

abstinentia 3.25.1–4 = 531 FHS&G = L 92) of “affinity” (*oikeiotês*) between one human being and another, and between human beings and animals. These scholars connected this doctrine with *oikeiôsis*, the concept which Stoics invoked to explain *both* the self-preserving instincts of newly born creatures *and* social bonding. Because appeal to *oikeiôsis* is made in Stobaeus’ account of Peripatetic ethics and also in the Academic/Peripatetic account delivered by Piso in Cicero, *De finibus* 5, Dirlmeier and the others thought they had a second textual basis for fathering the antecedents of *oikeiôsis* on Theophrastus. As used by the Stoics, the self-love constituted by *oikeiôsis* is nature’s norm for the *primary* behaviour of all creatures. If this doctrine was foreshadowed by Theophrastus, he would certainly have had a normative concept of nature which it would be perverse to suppose that the Stoics ignored.

It can now, I believe, be regarded as a fact that Theophrastus had no doctrine of *oikeiôsis*. Arguments against this supposition have been developed at length by Pohlenz, Brink, Pembroke and Moraux, and are accepted by Fortenbaugh.²⁸ Some points, however, still need to be emphasized.

A Peripatetic origin for *oikeiôsis* cannot be safely inferred from the prominence assigned to the concept in Stobaeus’ doxography of Peripatetic ethics (vol. II Wachsmuth, 116ff.). As was long ago recognized by J. N. Madvig, in his splendid commentary on Cicero’s *De finibus* (Excursus 7), that passage, like so much of *De finibus* 5, bears the trademark of Antiochus. It was Antiochus’ concern to postulate affinity between the Stoics on the one hand and the Academy/Peripatos on the other hand, often on the flimsiest of grounds. The historical distortions to which this concern led him are now well recognized (cf. above, n. 6). We may surely identify Antiochus as Plutarch’s unmentioned authority in the passage (*Comm. not.* 1069E = 501 FHS&G = L 61) where he chides Chrysippus for corrupting the ethical concept of nature to be found in Aristotle, Theophrastus, Xenocrates and Polemo.

²⁸ Cf. M. Pohlenz, *Grundfragen der stoischen Philosophie, NGG*, phil.-hist. Klasse (1940) 1–47; C. O. Brink, “Οἰκείωσις and Οἰκειότης: Theophrastus and Zeno on Nature in Moral Theory,” *Phronesis* 1 (1956) 123–45; S. G. Pembroke, “Οἰκειôsis,” in *Problems in Stoicism*, ed. A. A. Long (London 1971) 132–37; P. Moraux, *Der Aristotelismus bei den Griechen*, vol. I (Berlin 1973) 316–50. Their findings are endorsed by Fortenbaugh (see his commentary on L 92) and Sandbach, 1985, 29. For a nuanced treatment of the controversy, cf. H. Görgemanns, “Οἰκειôsis in Arius Didymus,” in *RUSCH* 1 (1983), 165–89. His discussion is especially useful in exploring Aristotle’s use of *synoikeiousthai* in *EN*.

Theophrastus' *oikeiotês* has nothing to do with the instinctual and self-regarding behaviour of newly born creatures. Although he postulates a "natural kinship" between all human beings, and between them and other animals, he draws no prescriptive conclusions from this relatedness in the passage on it excerpted or summarised by Porphyry (531 FHS&G). The same holds good for the much longer passage, where Porphyry reports Theophrastus' opposition to animal sacrifices (584A FHS&G), which repeats the point about *oikeiotês* between human beings (*De abst.* 2.22.2).²⁹ I stress this point because Charles Brink, supported by Paul Moraux, has argued that "Theophrastus' principle [of *oikeiotês*] had some part to play in the later development of moral theory because it helped to fill an important gap in the cosmopolitanism of the Stoics" (cf. above, n. 28, 137). Brink was led to this view because he supposed (op. cit. 140) that "[Stoic] *oikeiosis* does not strictly refer to mutual relationships as does ... *oikeiotes*." He therefore inferred that passages concerning the relatedness of human beings to one another in Stobaeus' summary of Peripatetic ethics and Cicero, *De finibus* 5, were inspired by Theophrastean *oikeiotês*; and he inferred, further, that passages of similar purport in texts where Cicero reports Stoic ethics (*De Fin.* 3.64 and *De Off.* 1.50–55) reflect Stoic usage of Theophrastus' doctrine of natural kinship. Brink recognized that none of these texts, Peripatetic or Stoic, applied *oikeiotês* (as Theophrastus does) to the relatedness of human to non-human animals. However, this did not deter him from saying (op. cit. 137): "The injunctions neatly fit [Theophrastus'] theory of universal kinship," and further: "Later Stoics could take over the whole range of Theophrastus' *oikeiotes* grafted on to their own doctrines" (141).

These claims all collapse, in my opinion, once we acknowledge that Brink was completely mistaken in asserting that "[Stoic] *oikeiosis* does not, strictly, refer to mutual relationships" (140).

It was the followers of Zeno, according to Porphyry, and not Theophrastus who made *oikeiôsis* the foundation of justice (*De abstinentia* 3.19 = *SVF* 1.197). Chrysippus (the earliest Stoic to whom

²⁹ Theophrastus' opposition to animal sacrifice is grounded in a series of considerations; none of these is an explicit appeal to human *oikeiotês* with animals, though one might regard that principle as implicit in the observations concerning the inappropriateness of gratuitously depriving animals of their souls (Porphyry, *De abst.* 2.12.4 = 584A.111–16 FHS&G).

we can certainly attribute the concept of *oikeiôsis* according to Plutarch, was always asserting that "as soon as we are born we have a relationship of *oikeiôsis* to ourselves, and our parts and our offspring" (*Stoic. rep.* 1038B). The Stoics derived sociability from the parental concerns that are the final manifestation of *oikeiôsis*. Cicero makes this clear in his Stoic doxography of *De finibus* 3.62–68, where he specifies the *communis hominum inter homines naturalis commendatio*. *Commendatio* is one of his standard translations of *oikeiôsis*. How the Stoics related the primary or self-regarding *oikeiôsis* to its "other regarding" aspect is not adequately explained in the surviving sources.³⁰ But the evidence is quite sufficient, I think, to show that *oikeiôsis* in their philosophy always included mutual relationships as well as the primary relationship with self. In the Stoic Hierocles' *Foundations of Ethics*, a text not cited by Brink, the author uses distinct terms in order to distinguish the different objects of *oikeiôsis*.³¹

I do not exclude the possibility that a Stoic as late as Hierocles may have been influenced by ethical and political texts of Aristotle and Theophrastus. On *oikeiôsis*, however, I find Hierocles' main doctrine to be adequately accounted for by what we know from Cicero's officially Stoic account and from Chrysippus. Their evidence in turn betrays no trace of Theophrastean *oikeiôtês*. Since that doctrine has no explicitly normative implications for human action in general, I doubt whether we have any grounds for thinking that Theophrastus said anything about nature in ethics that went sufficiently beyond Aristotle to constitute a prefiguring of Stoicism. I also think that a normative concept of nature would not sit well with Theophrastus' strong emphasis on *paideia* (cf.

³⁰ Cf. B. Inwood, "Hierocles: Theory and Argument in the Second Century A.D.," *Oxford Studies in Ancient Philosophy* 2 (1984) 179–83.

³¹ Hierocles, col. IX.1–9; cf. my commentary on this work in *Corpus dei Papiri Filosofici Greci e Latini*, vol. 1** (Firenze 1992). Brink's suggestion is given some support by B. Inwood, in his "Comments on Professor Görgemanns' Paper," in *RUSCH* 1, 193–99. Having no space to deal adequately with Inwood's remarks here, I make just one point. Chrysippus, as cited by Plutarch (main text above), traced "*oikeiôsis* to our offspring" to the very beginning of a person's life. It would be fatuous to point out that an infant does not have offspring, but Chrysippus' point (perhaps garbled by Plutarch) is surely that parental concern is *instinctual*. If that was Chrysippus' view, there is not a problem about "deriving" social *oikeiôsis* from *oikeiôsis* to oneself, as Inwood maintains: *oikeiôsis* will be "self-regarding"? and (at least potentially) "other regarding" from the moment of birth. In any case, I find it impossible to believe that Stoic philosophers, obsessed with morality as they were, needed to look to Theophrastus or anyone else in order to reconcile the egoism of *oikeiôsis* to oneself with altruism.

465 FHS&G = L 29, and 466AB FHS&G, on the educational reasons for beginning philosophy with ethics) and the links he may have drawn between a person's nature and *heimarmenê* (cf. 503–4 FHS&G = L 63–4). As a final observation, I note that nature does not figure in the titles of any works by Theophrastus that clearly fall within the domain of ethics. In the short list of Zeno's works (DL 7.4), the first that is cited is *On the life in accordance with nature*, and the second is *On impulse or on the nature of man*.³²

The upshot of these remarks is that von Arnim, Walzer, Dirlmeier and Regenbogen were not justified in thinking that the Stoic life in agreement with nature has an historical or even a conceptual connection with the ethics of Theophrastus. That finding, of course, would be overturned if it could be shown that Cicero, *De Finibus* 5 is Theophrastean rather than Antiochean in its Stoic-sounding claims about nature; there are risks here of circular reasoning. I can only skirt them by insisting that the evidence of that work points to Antiochus rather than Theophrastus as Cicero's authority (cf. above, n. 6).

From Chrysippus onward, Stoic ethics became highly elaborated in its topics and formulations. If the surviving doxographies record his imprint, as they surely do, he was already using formal classifications of goods, virtues, and passions, which could also be applied to Peripatetic ethics.³³ Whether Zeno and Cleanthes did this kind of thing is not determinable, but it seems doubtful. If Theophrastus and other Peripatetics had already done so, Chrysippus may well have learned from them. But the evidence allows the possibility that the similarities between Stoic and later Peripatetic doxographies are due to Chrysippus' influence.

IV. Theophrastus and Stoics Physics

Turning now from ethics to physics, I will have to be much briefer than the topic warrants. As I have already said, it seems to me improbable that the Stoics developed their physics in total ignorance of such

³² It should be noted, too, that Zeno's attested teacher, the Academic Polemo, *did* write a work in more than one book *Περὶ τοῦ κατὰ φύσιν βίου*; Clem. Alex. *Strom.* 7.6.32, 9 p. 25 Stählin (= *Polemonis Academici Fragmenta*, 97, ed. M. Gigante, *Rendiconti dell'Accademia di Archeologia Lettere e Belle Arti di Napoli* 51 [1976]).

³³ Cf. the material collected in Long and Sedley, *The Hellenistic Philosophers*, 60J–M, 65B, E, and also my article "Arius Didymus and the Exposition of Stoic Ethics," in *RUSCH* 1 (1983) 41–65; reprinted in *Stoic Studies* (above, n. 14) 107–33.

Peripatetic concepts as *hylê* and mixture. In general, however, I believe that they were much more powerfully influenced by Heraclitus, Plato's *Timaeus* as interpreted by the Academy from Speusippus to Polemo, and the work of Hellenistic doctors on *pneuma*. That the Stoics' interpretation of Heraclitus was itself dominantly shaped by Theophrastus has been commonly assumed.³⁴ Many years ago I believe I succeeded in showing that Cleanthes (the Stoic primarily responsible for incorporating Heraclitus) read Heraclitus for himself;³⁵ and he certainly wrote about him at length, possibly basing his four books of *Interpretations of Heraclitus* (SVF 1.481) on the identical number of volumes on the same theme composed by the Academic Heracleides of Pontus (DL 5.88= Fr. 39 Wehrli). Theophrastus, I conclude, was at most one influence on Stoic readings of Heraclitus.³⁶

When it comes to broad characterizations, what the physical world of the early Stoics has in common with that of the Lyceum seems to me to be less significant than its differences—such as materialism, divine immanence or pantheism and world-soul, non-eternity, determinism, and so forth. Those differences are compatible with the kind of affinity Marlein van Raalte finds between Theophrastus and what she calls “the idea of the cosmos as an organic whole.”³⁷ What I question is whether Zeno and Cleanthes needed any impulse from Theophrastus in this direction, especially one developed in a work as technical and esoteric as his *Metaphysics*. They can hardly have sympathized with the distinction Theophrastus drew between the world's divinely caused order and the world's “nature,” as the source of its disorder.³⁸ As Van Raalte herself

³⁴ As for instance by G. S. Kirk in *Heraclitus. The Cosmic Fragments* (Cambridge 1954) 303–27.

³⁵ “Heraclitus and Stoicism,” *Philosophia* 4/5 (1975/76) esp. 137–41; reprinted in *Stoic Studies* (above, n. 14) 35–57.

³⁶ In my article (above n. 35) I discuss at length parallels between Cleanthes' *Hymn to Zeus* and fragments of Heraclitus. I also try to show that the Heraclitean imprint in SVF 1.102 (Zeno) and 1.497 (Cleanthes) is not only closer than Theophrastus (A 5 DK and DL 9.8–9) to the words of Heraclitus himself but significantly different from Theophrastus in important respects, such as the treatment of fire.

³⁷ Cf. her interesting study of Theophrastus' metaphysics from this point of view in *RUSCH* 3, esp. 205–8. My main point is supported by Krämer 1971 (above, n. 15) 112–17. See also A. Laks and G. Most, *Théophraste. Métaphysique* (Paris 1993) xxvi, where they question the plausibility “à faire du Théophraste de l'opuscule un proto-stoïcien.”

³⁸ Cf. Jaap Mansfeld's discussion of the Syriac fragment of Theophrastus in its Arabic version (above, n. 7).

recognizes, Heraclitus and the *Timaeus* offered support for the kind of organicism that the Stoics favoured. We need no resorts to conjecture in positing the influence of these sources on the development of their physical theory.

David Sedley draws attention in his paper (this volume, 351) to an intriguing similarity between the Stoics' twin physical principles, "matter" and "god," and Theophrastus' paraphrase of the *Timaeus* (Simplicius, *In Phys.* 1.2 184b15 = 230 FHS&G). In that passage, Theophrastus says that Plato wished to make the principles two in number, "matter," which he calls "receptive of everything" and "cause"/"active agent," which he attaches to the power of god and the good. Sedley conjectures, most plausibly, that Theophrastus is not inventing this reading of the *Timaeus* but "echoing a way in which that text was currently being expounded in Plato's own school."³⁹ In favour of his proposal is the fact that 'matter' and 'god' are two of the standard ways of referring to Plato's *archai* in the doxographical tradition of Plato (cf. DL 3.69 and Cicero, *Acad.* 2.118). On the basis of the Theophrastean testimony, we may be fairly confident that it is not the Stoics who have influenced the Plato doxography, but the other way round. Zeno's Academic teachers, probably unhappy with Plato's hypostatized Forms, were disseminating the "matter-god" doctrine (a two-principle reading of the *Timaeus*).⁴⁰ This "hypothesis," as Sedley says, "would also comfortably explain how the matter-god doctrine passed in due course into the Stoicism of Polemo's pupil Zeno." One cannot, of course, rule out *a priori* the possibility that the Stoics learned their reading of Plato's principles from Theophrastus himself. However, given what we know of their Academic antecedents, this explanation seems uneconomical.⁴¹

In his book, *Die Physik des Theophrastos von Eresos* (Bad Hamburg, 1964, 354 above), Peter Steinmetz asserts that Theophrastus exerted a strong impact on the thought of Chrysippus, but, as far as I can see, he

³⁹ 349 above. For a very full discussion of the two-fold Academic identification of Plato's *archai*, drawing from the *Timaeus*, cf. Krämer 1971, 117–22. He finds Xenocrates (who is anachronistically cited as one of Zeno's mentors in the biographical tradition) the principal figure responsible. Cf. Sandbach 1985, 35–36.

⁴⁰ In an alternative (Middle Platonic?) doxography, based on a more accurate reading of the *Timaeus*, a third "principle," (incorporeal) form, is added to the other pair (cf. Diels, *DG* 288 and Alexander, as cited in 230 FHS&G).

⁴¹ Cf. Krämer 1971, 122 n. 62. Krämer sees Theophrastus as formulating the two-principle doctrine in a way to make it conform to Peripatetic physics.

does not cite any text or doctrine in support of this claim. In an article entitled "Elementary Physics in the Lyceum and Stoa," *Isis* 66 (1975) 211–29, James Longrigg proposes that Theophrastus influenced the Stoics in his rejection of Aristotle's unmoved mover. Yet if, as Longrigg recognizes, Zeno wanted to follow Plato in referring cosmic motion to the world-soul, we can hardly invoke Theophrastus' doubts about the unmoved mover as a proof that Zeno was heeding him. Longrigg also connects two further Theophrastean doctrines with the Stoics—his differentiation in *De igne* 44 of generative and destructive fire, and his treatment of air as naturally cold (*De igne* 26). In these cases too, Zeno had other authorities at his disposal. As David Hahm points out, the Theophrastean distinction is prefigured by Xenophon, *Mem.* 4.7.7.⁴² This is a text we have every reason to suppose that Zeno knew intimately. Indeed, Sextus Empiricus (*Adv. Math.* 9.101) says that Xenophon was Zeno's starting-point for his argument that the world is rational.⁴³ As for the natural coldness of air, that thesis was also defended by the doctor Philistion (Fr. 4), who anticipated the Stoics in associating each of the four elements with only one quality.⁴⁴

The most intriguing of the possible connections in physics between Zeno and Theophrastus is the testimony of Philo (*Aet.* 23.117–27.149 = 184 FHS&G). We know that Zeno in his work *On the Whole* discussed the coming to be and perishing of the world. Are he and his followers the unnamed persons whose reasons for believing that the world will perish were, according to Philo, refuted by Theophrastus? So it has been argued, by Zeller and others, and their arguments have also been contested. In a note in Long and Sedley, *The Hellenistic Philosophers* (vol. 2, p. 275 ad 46 J), written by Long and not Sedley(!), I gave my vote in favour of Zeller, but I now think that W. Wiersma, writing in *Mnemosyne* (1940) 235–43, showed why I should have sided with the sceptics. To that must now be added all the searching points that David Sedley has advanced in his paper in this volume (331ff.); he connects 184 FHS&G with an Epicurean response to Theophrastus, which seems

⁴² *The Origins of Stoic Cosmology* (Columbus 1977) 198 n. 18.

⁴³ In "Socrates in Hellenistic Philosophy," *CQ* 38 (1988) 162–63 = *Stoic Studies* 20–21, I have pointed to Xenophon, *Mem.* 1.4.5–18 and 4.3.2–18 (passages in which "Socrates" expatiates on divine providence and divine omnipresence) as texts that Zeno probably appealed to in justifying the Socratic foundations of his theology and teleology.

⁴⁴ Cf. Sandbach 1985, 38.

to undermine a chronology that could involve Theophrastus himself in responding to Zeno. Undoubtedly there is Stoic material in this passage, but that may have more to do with Philo himself than anything of which Theophrastus took notice.

V. Theophrastus and Stoic Logic

Zeno and Cleanthes had some interests in logic, but details largely escape us. The evidence suggests that they were principally influenced by the dialecticians, Diodorus Cronus and Philo, and secondarily by the Academy.⁴⁵ Formal logic in the Stoa was first fully initiated by Chrysippus. In *RUSCH* 2 (1985) 125–41, Jonathan Barnes wrote a fascinating paper, “Theophrastus and Hypothetical Syllogistic,” in which he concludes, that: “Even if Theophrastus’ work [on hypothetical syllogisms] was studied by Chrysippus, it can have had at most a superficial influence on his thought” (139).⁴⁶ What Barnes finds suggestive, none the less, is a connection he detects between the five “indemonstrable” argument forms of Chrysippus, and Alexander of Aphrodisias’ belief (*In Anal Pr.* 1.44 50a39 = 111E FHS&G) that Theophrastus discussed hypothetical syllogisms which have the same logical form as that of Chrysippus’ indemonstrables. Setting aside all questions about the historical and textual assessment of this testimony, I want to make just one remark.

The interest of the evidence is undeniable. It suggests that Theophrastus anticipated Chrysippus not only in elaborating a hypothetical syllogistic, but also one in which letter symbols for the variable constituents of the premises stand for propositions as distinct from terms. It appears, in other words, that Theophrastus had elaborated a logic of propositions. We certainly cannot exclude the possibility that his work in logic was drawn upon by Chrysippus. However, for Theophrastus, it seems, the categorical syllogism remained primary. There is no evidence, I think, that his interest in hypothetical syllogisms led him to formulate rules for the validity of conditional inferences as

⁴⁵ Cf. M. Frede, *Die stoische Logik* (Göttingen 1974) 12–26; J. M. Rist, “Zeno and the Origins of Stoic Logic,” in *Les Stoiciens et leur Logique*, ed. J. Brunschwig (Paris 1978) 387–400.

⁴⁶ Cf. also Barnes’ further article, “Terms and Sentences: Theophrastus on Hypothetical Syllogisms,” *Proc. Brit. Acad.* 69 (1983) 279–326.

such. From what we know about Chrysippus, the foundation of his logic was precisely this—the connectedness between antecedent and consequent exhibited in a sound conditional. This fact again links him extremely closely to Philo and Diodorus. Barnes conjectures that Theophrastus offered reductions of hypothetical syllogisms to four, if not all five, of the schemes that constitute Chrysippus' indemonstrables. Even if this conjecture is sound, we may be dealing with no more than a coincidence. For Chrysippus, the five indemonstrable forms of hypothetical argument constitute something like axioms of the theory. For Theophrastus, if he elaborated them, I may cite Barnes again (138f.): "there is no reason to believe that he regarded his perfect syllogisms [i.e. of *modus ponens*, or *modus tollens* forms] as the basis for arguments of different forms Theophrastus invented hypothetical syllogistic but he did not invent Stoic logic."⁴⁷

VI. Theophrastus and the Early Stoa: a Case of Divergent Lines

There I must rest my case for the view that Theophrastus and the early Stoa paid little attention to one another. The case is strongest, I think, in regard to ethics (which I have emphasized) and most open to challenge in physics. Although I have found nothing in Stoic physics that clamours to be read as response or indebtedness to Theophrastus specifically, the question should remain open. However, the arguments from silence that I have attempted to back up with analysis of various details seem cumulatively strong. If that is really so, what they point to is a need for much more work concerning the self-definition and methodologies of the Hellenistic schools in their formative years. They came to be called *haireseis*, and my findings seem to add substance to this sectarian designation. I also think that sectarianism and mutual exclusiveness (you cannot be both a Stoic and an Epicurean at the same time, for instance) were part of the appeal of these schools.⁴⁸

⁴⁷ I gratefully acknowledge the advice of Mario Mignucci in formulating this paragraph, though he should not be held responsible for the views it expresses.

⁴⁸ For detailed treatment of this point, I may refer to "Hellenistic Ethics and Philosophical Power" (above, n. 21). The eclecticism and syncretism that begin in the first century B.C. have less to do with heads of schools or blurring of doctrinal differences (Antiochus is the great exception) than with the diffusion of philosophy among educated laymen, who use it selectively and idiosyncratically: cf. J. M. Dillon and A. A.

Much of the best modern work in Hellenistic philosophy has derived from identifying dialectical debates, whether between contemporary schools (the Stoa and the sceptical Academy, for instance), or in the relation one school takes up with respect to the preceding tradition. What we have not perhaps sufficiently recognized is the selective character of this dialectic. We think of the later Stoics and Epicureans as radically antagonistic to one another. Yet, as David Sedley points out in his paper in this volume, there is no evidence that Epicurus himself paid any attention to Zeno.⁴⁹ The Stoics did not, on Plutarch's testimony, figure in the Epicurean Colotes' gallery of philosophers who make life impossible. Nor is anything attested about what Zeno and contemporary Stoics may have said in reference to Epicurus.⁵⁰ The vagaries of our evidence, of course, are too great to place much trust on such silence. Yet Plutarch takes Colotes' contemporary, but anonymous, targets to include the Academy of Arcesilaus as well as past philosophers like Socrates and Plato (cf. *Adv. Col.* 1120C, 1122A). Were the Stoics too insignificant and disorganized at this date to be worth mentioning? That seems improbable as an explanation of Colotes' silence on them.

The Stoics were probably the first philosophers to think of their findings as a "system"—a system, moreover, in which everything fitted together coherently, mirroring their model of nature's structural unity. The contemporary philosophers the early Stoics could not ignore were the Academic sceptics, both because of their rivalry over Socrates and because of the challenge the Academics constituted to the certainty the Stoics required of philosophical knowledge. My hunch is that Zeno, having formed his ideas under the influences I have outlined, made it his business to publicize the Stoa as the Socratic sect that had grasped the big picture. He was more interested in outlining his own system, collect-

Long (eds.), *The Question of "Eclecticism."* *Studies in Later Greek Philosophy* (Berkeley and Los Angeles) 1988, esp. 1–4.

⁴⁹ All I have found concerning any allusion by Epicurus to Stoics is a mention of Persaeus and Philonides the Theban in one of his letters (DL 7.9 = SVF 1.3).

⁵⁰ One is naturally tempted to presume that Cleanthes' two books *On pleasure* attacked Epicurus, and that Sphaerus did so too in his work *On atoms and eidola*. Yet where we might expect to find an early Stoic work explicitly directed at Epicurus, we learn instead that Cleanthes wrote *Against Democritus*. All I have found by way of direct allusion to Epicurus from Stoics is a sarcastic reference to his hedonism by Chrysippus (Athenaeus 278E = SVF 3.709), and an allegation by the Cynic Oenomaus that Chrysippus frequently maligned Epicurus for being *malakos* and *adikos* (SVF 2.978).

ing and training disciples (and, perhaps, in exerting influence on his society) than in the patient inquiries of Theophrastus.⁵¹

(I do not want to suggest that Chrysippus, two generations later, was similarly doctrinaire and self-absorbed. There is evidence to suggest that he, at least, took careful account of the theories of other philosophers, and was prepared to confess the difficulty of arriving at convincing solutions to problems.⁵² My findings in this paper remain aporetic concerning his possible interest in Theophrastus.)

Are there parallels for the deliberate ignorance or lack of mutual interest I am positing? Plato is cavalier, to say the least, in his total reticence on Democritus and Democritean atomism. It is at least arguable that Lucretius, in contrast with Philodemus, concerned himself only little with the Stoics.⁵³ And while that, if it is true, could be due to his primary dependence on the books of Epicurus himself, the impression of dialectical exchange all round that we derive from Cicero may be largely an outcome of his Academic sources, who made it their business to pit one school against another. A further, and not unrelated point, is the development of doxography, to which Theophrastus greatly contributed but which was hardly entrenched in the tradition when Zeno began his teaching.

It would be nice to think that ancient philosophers, in spite of their school allegiances, were engaged in a cooperative inquiry into truth. The record shows that this was so in only exceptional cases.⁵⁴ The founders of schools were generally treated as authoritative by their successors, and the founders themselves tended to be charismatic figures

⁵¹ In her paper (above, n. 21) Fernanda Decleva Caizzi convincingly argues that Zeno's manner of presenting himself included a deliberate cult of poverty among other self-publicizing devices. I am tempted to see these traits as aspects of Zeno's Socratic/Cynic image, and to think that they attest to an attempt, on his part, to give the impression of going his own way in philosophy. Cf. also what is said concerning Pyrrho, DL 9.63–64.

⁵² Note, for example, the scrupulous way Chrysippus presents disagreements between physicians and philosophers on the soul's parts and location (Galen, *Plac.* 3.1.10–15 = *SVF* 2.885), and his hesitations about how to explain the sufferings of the innocent (Plut., *De Stoic. rep.* 1051C).

⁵³ D. J. Furley, "Lucretius and the Stoics," *BICS* 13 (1966) 13–33. Cf. on the other side, J. Schmidt, *Lukrez und die Stoiker* (Marburg 1975).

⁵⁴ Cf. David Sedley's persuasive study, "Philosophical Allegiance in the Greco-Roman World," in *Philosophia Togata. Essays on Philosophy and Roman Society*, ed. M. Griffin and J. Barnes (Oxford 1989) 97–119.

who went out of their way to emphasize their independence from their more senior contemporaries. Theophrastus and Zeno, I think, conformed to this pattern. The smallness of Athens and our respect for both men are insufficient reasons for thinking that they were on the same fundamental wavelength.⁵⁵ I have tried to show that they probably were not, and why they were not.

⁵⁵ Sandbach seems to me to be on the right lines when he writes (1985, 13): "What was most prominent in [the work of Theophrastus] would have offered no attraction, detailed scientific or quasi-scientific studies and an easy-going morality." So far as science is concerned, there was much more of it in Epicurus' work than in Zeno's.

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